Information Systems to Advance Environmental Justice

State Environmental Justice Training Webinar

Wisconsin Department of Health

Texas Commission on Environmental Quality

U.S. Environmental Protection Agency

September 10, 2020

Introduction

- Information Systems to Advance Environmental Justice
- Important Logistical Information

Charles Lee
Senior Policy Advisor for Environmental Justice
U.S. Environmental Protection Agency
Moderator

https://www.epa.gov/environmentaljustice/environmental-justice-learning-center

Overarching Messages

1. Transition from screening-level to refined EJ analysis
2. Link EJ to public health
3. Take action with data; demonstrate environmental and public health results
4. Make data user-friendly; promote transparency and stakeholder input
5. EJ approaches can now be learned and replicated; each presentation provides examples

Tracking 101: Wisconsin Environmental Public Health Tracking

Constance Bell
Health Educator
Bureau of Environmental and Occupational Health
Division of Public Health
Wisconsin Department of Health

TRACKING 101

WISCONSIN ENVIRONMENTAL PUBLIC HEALTH TRACKING

EPA Environmental Justice Webinar 9/10/2020

Bureau of Environmental and Occupational Health

Division of Public Health

Wisconsin Department of Health Services

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Agenda

YOUR SOURCE FOR ENVIRONMENTAL PUBLIC HEALTH DATA.

TRACK.

Explore the data, compare counties, age groups, and years

ANALYZE.

Create charts, maps, and tables to visualize and interpret the data

ACT.

Use the data to target education, programming, and policies to address your community's needs

Our Target Audiences

Local and Tribal health departments

Academics, researchers, students

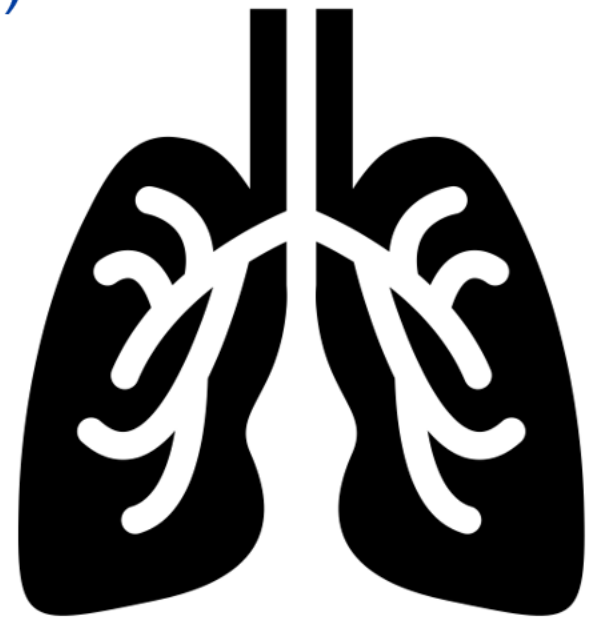
Nonprofits and advocacy groups

Health professionals

Policymakers

HEALTH HAZARD

(air pollution)



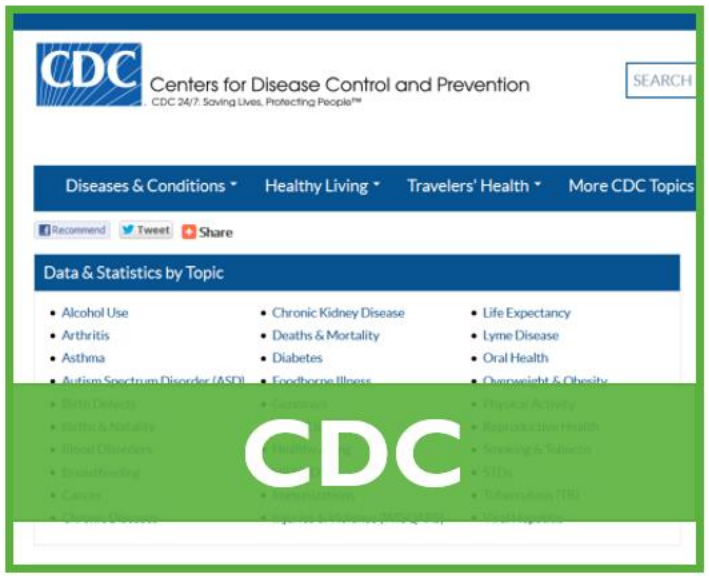
EXPOSURE

(breathing it in)

HEALTH EFFECT

(asthma)

To get the right data,
you might have to visit several databases.



To get the right data,
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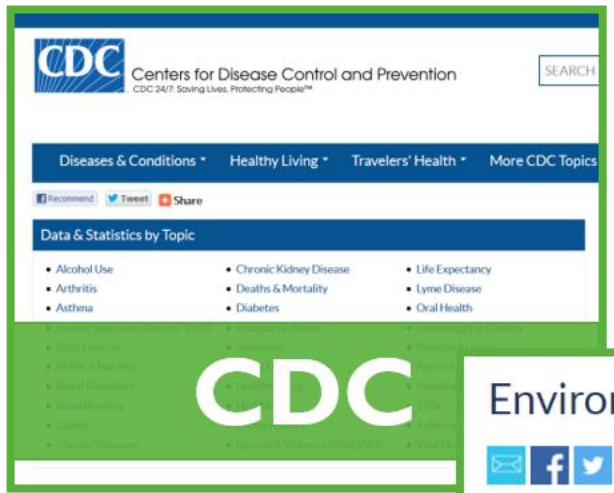
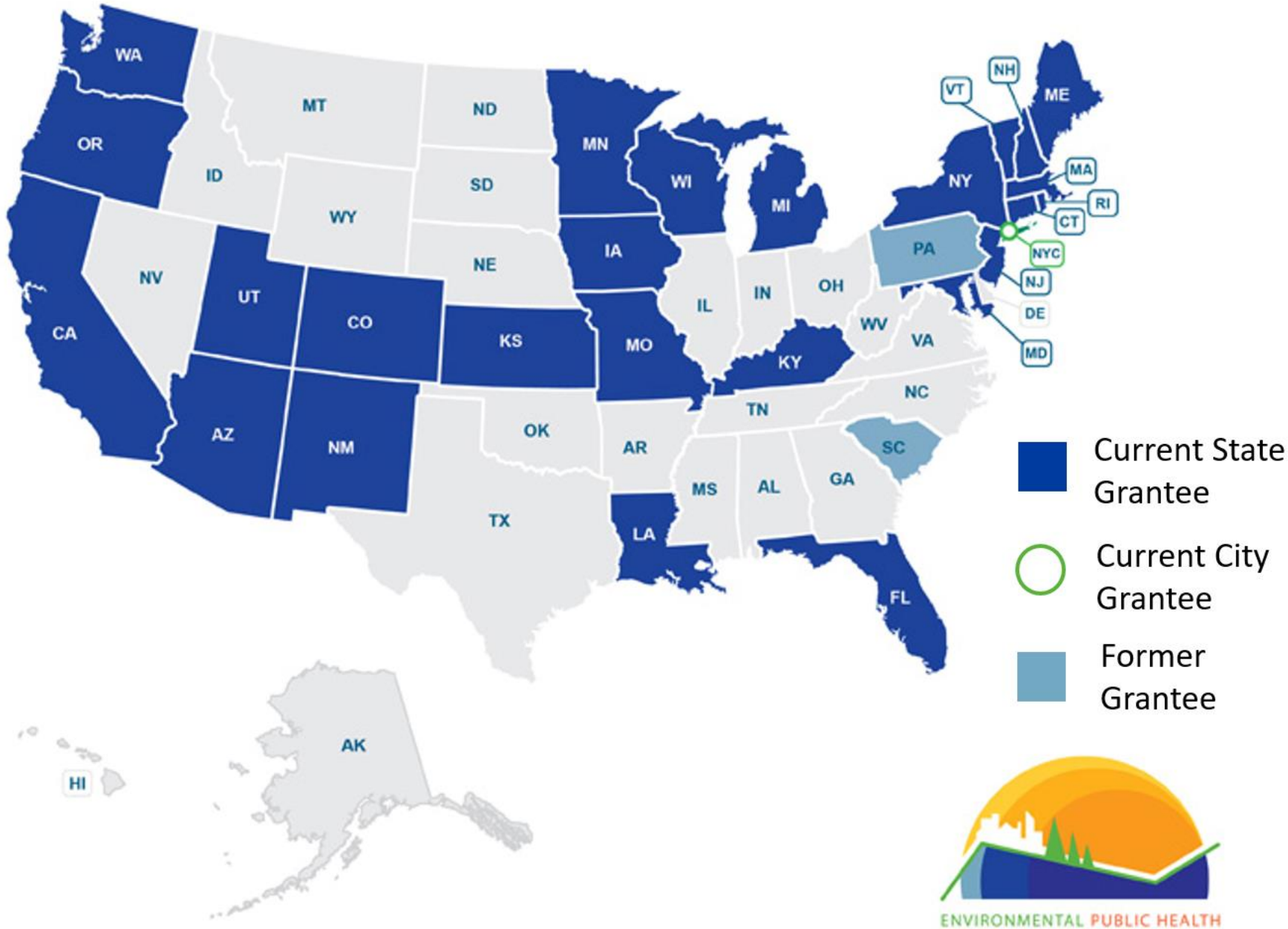




August 2017

ENVIRONMENTAL PUBLIC HEALTH TRACKING

Data Topics (1)

Air quality

Alcohol outlet density (municipal)

Asthma

Birth defects

Cancer

Carbon monoxide poisoning

Childhood lead poisoning (census tract)

Data Topics (2)

Climate change

Chronic obstructive pulmonary disease

Community characteristics (census tract)

Community design (census tract)

Heart attack

Heat stress

Immunizations

Data Topics (3)

Lyme disease

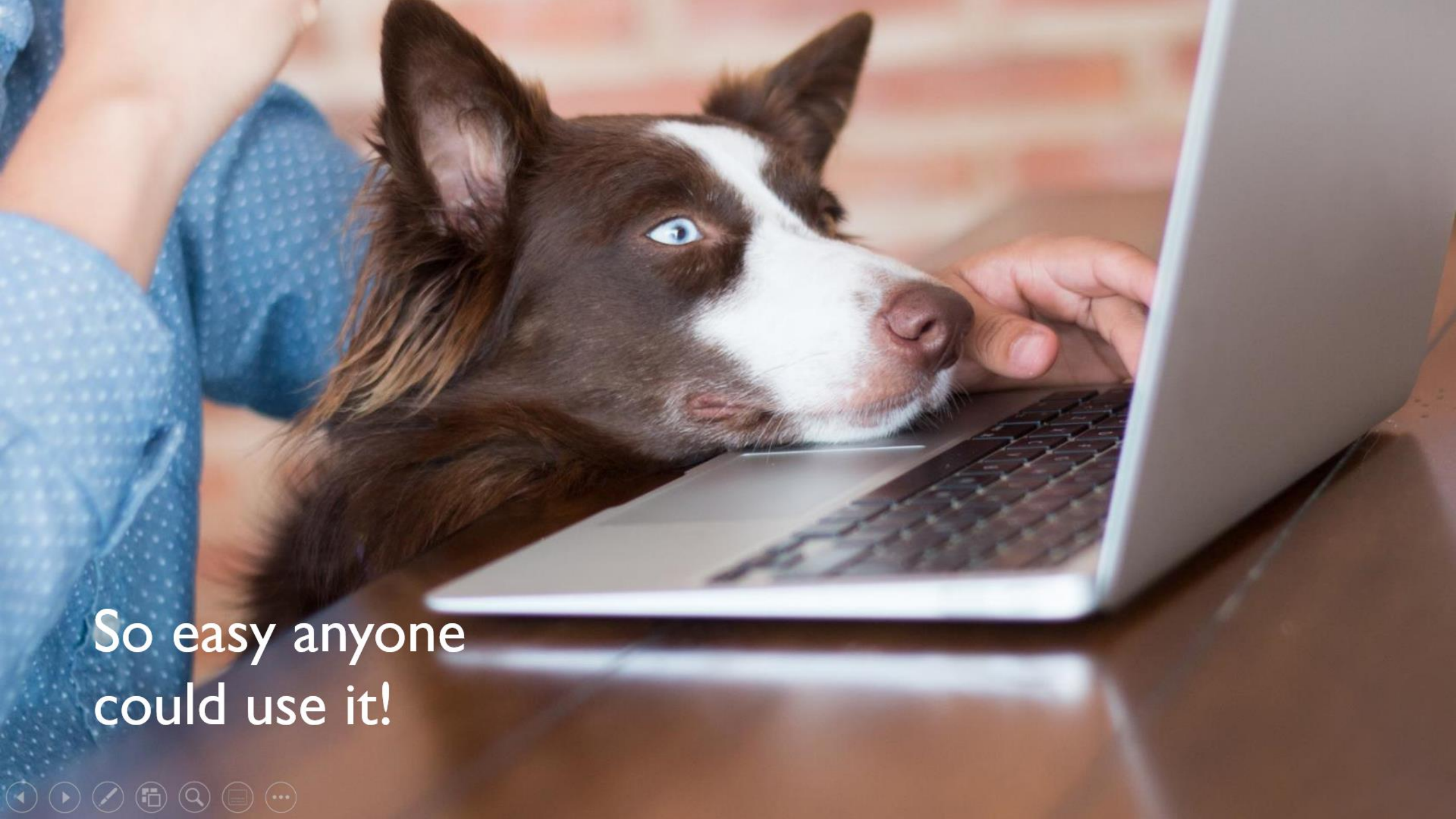
Oral health (fluoridation)

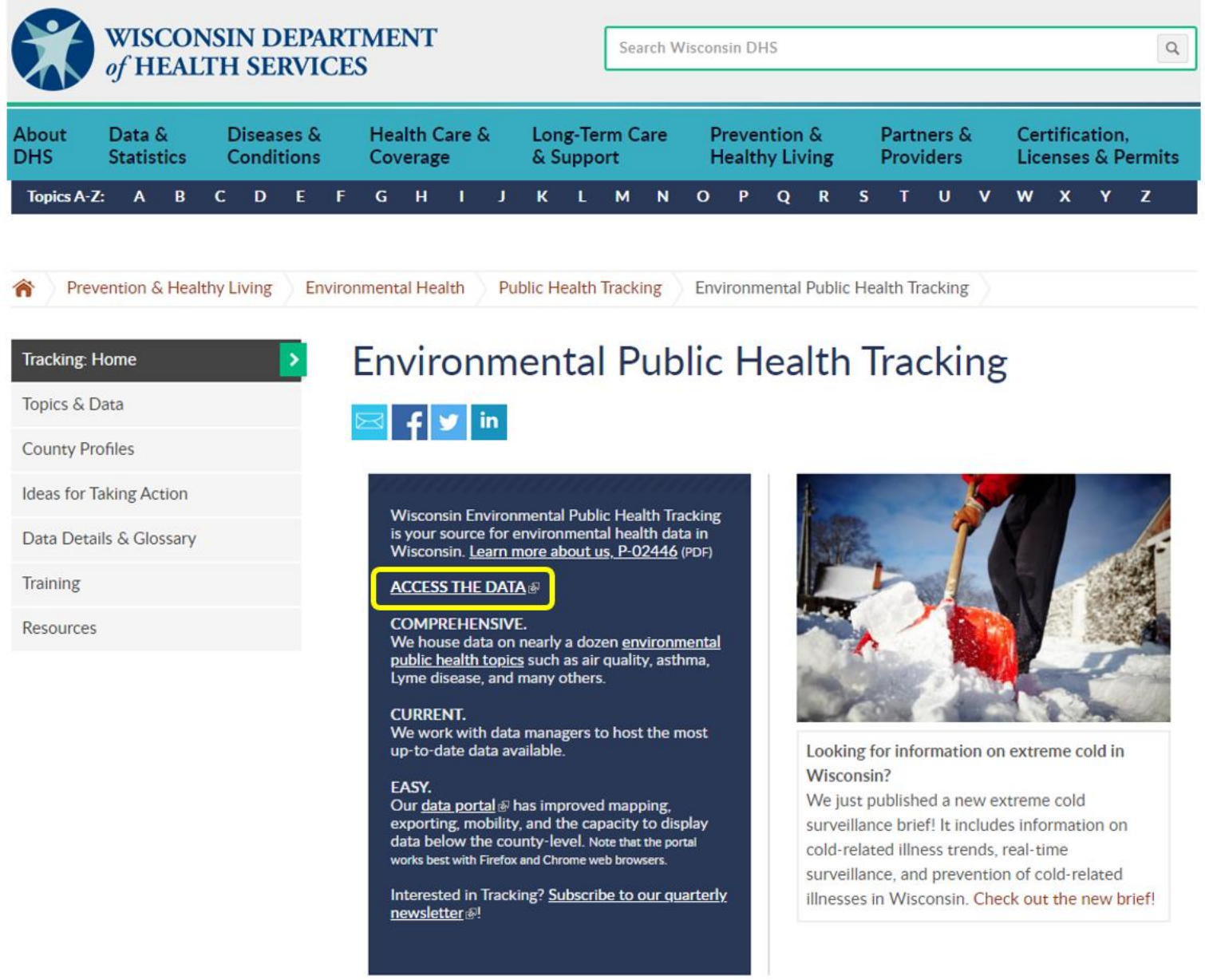
Populations and vulnerabilities (census tract)

Reproductive outcomes

Toxic air emissions (census tract)

Water quality

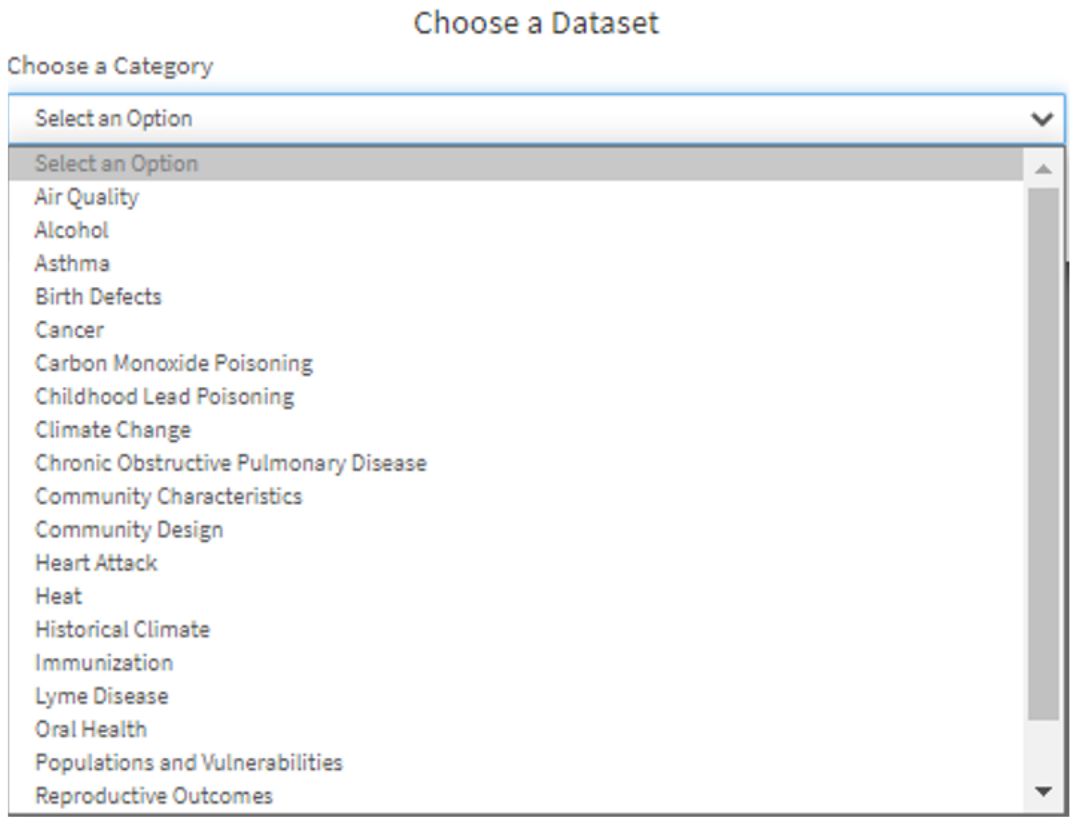

So easy anyone
could use it!



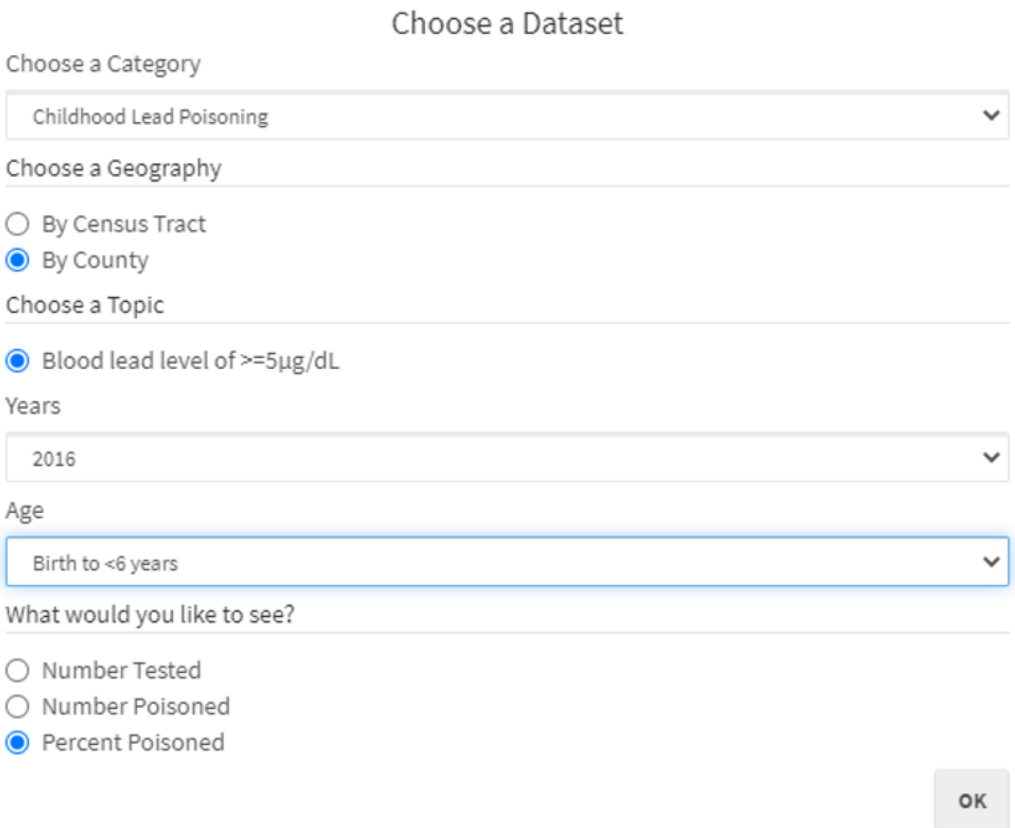
Tracking homepage: dhs.wisconsin.gov/epht

Direct portal link: dhsgis.wi.gov/DHS/EPHTracker

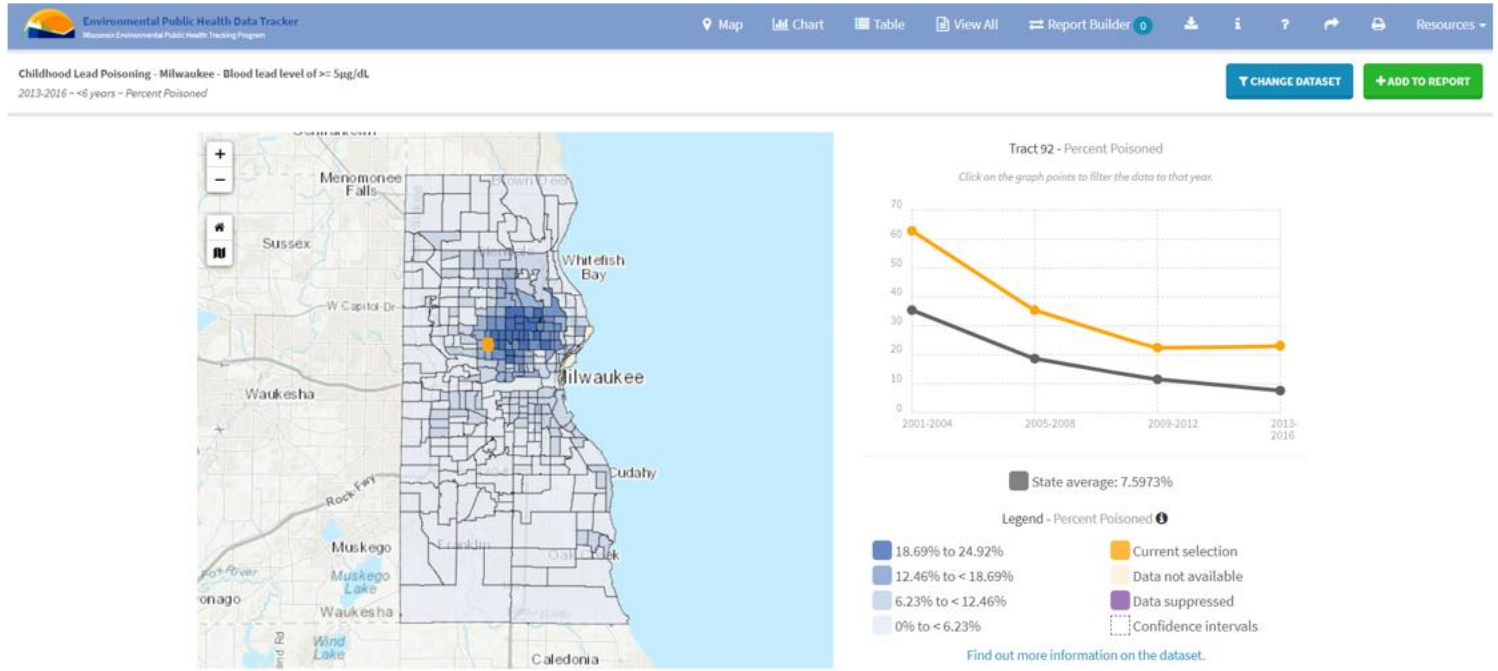
STEP 1


Choose a Dataset
Choose a Category
Select an Option
Select an Option
Air Quality
Alcohol
Asthma
Birth Defects
Cancer
Carbon Monoxide Poisoning
Childhood Lead Poisoning
Climate Change
Chronic Obstructive Pulmonary Disease
Community Characteristics
Community Design
Heart Attack
Heat
Historical Climate
Immunization
Lyme Disease
Oral Health
Populations and Vulnerabilities
Reproductive Outcomes

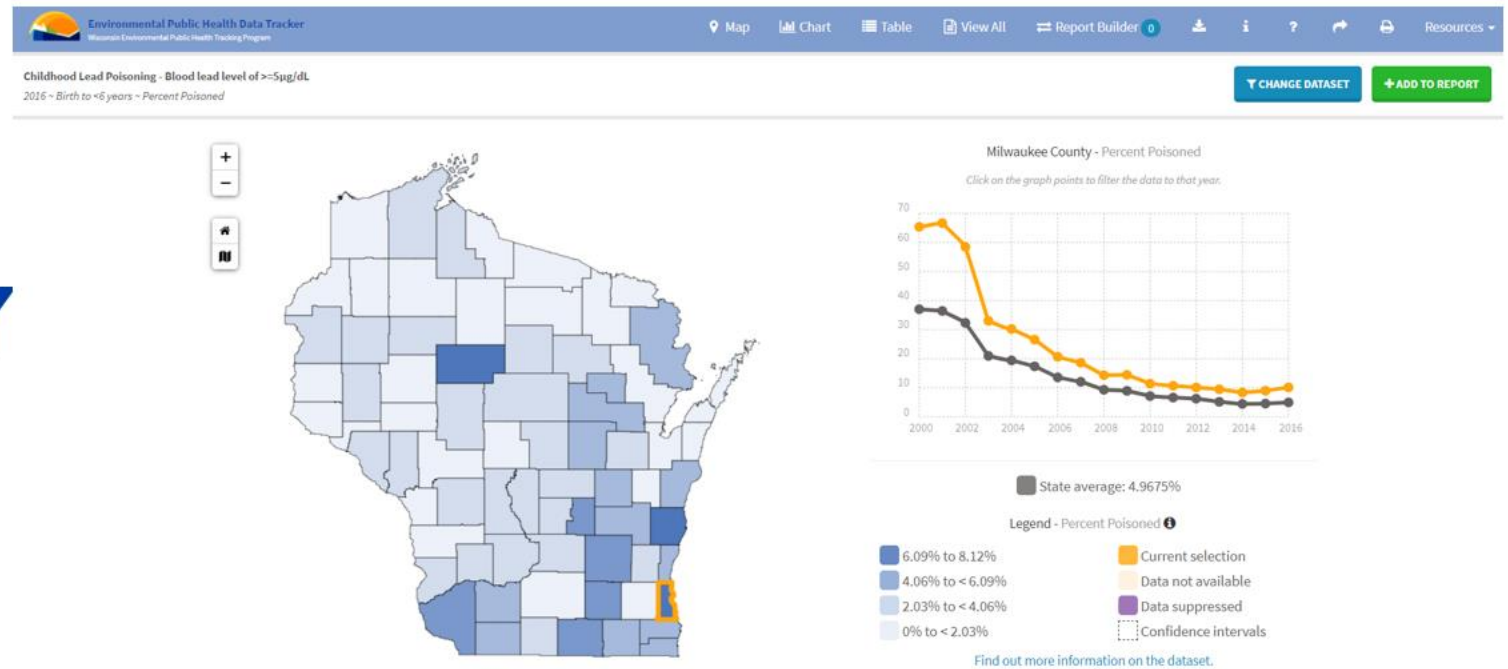
STEP 2


Choose a Dataset
Choose a Category
Childhood Lead Poisoning
Choose a Geography
By Census Tract
By County
Choose a Topic
Blood lead level of >=5µg/dL
Years
2016
Age
Birth to <6 years
What would you like to see?
Number Tested
Number Poisoned
Percent Poisoned
OK

CENSUS TRACT



COUNTY LEVEL



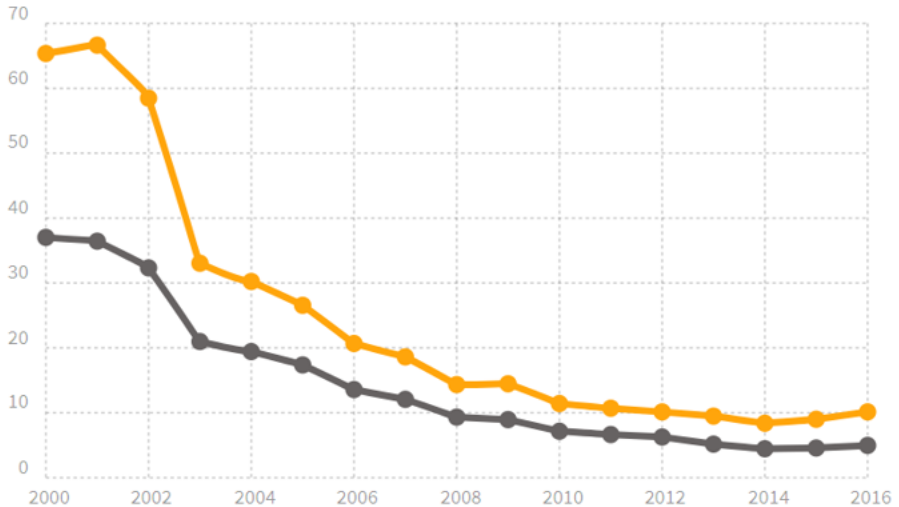
Childhood Lead Poisoning - Blood lead level of >=5µg/dL

2016 ~ Birth to <6 years ~ Percent Poisoned

CHANGE DATASET | + ADD TO REPORT

Milwaukee County - Percent Poisoned

Click on the graph points to filter the data to that year.

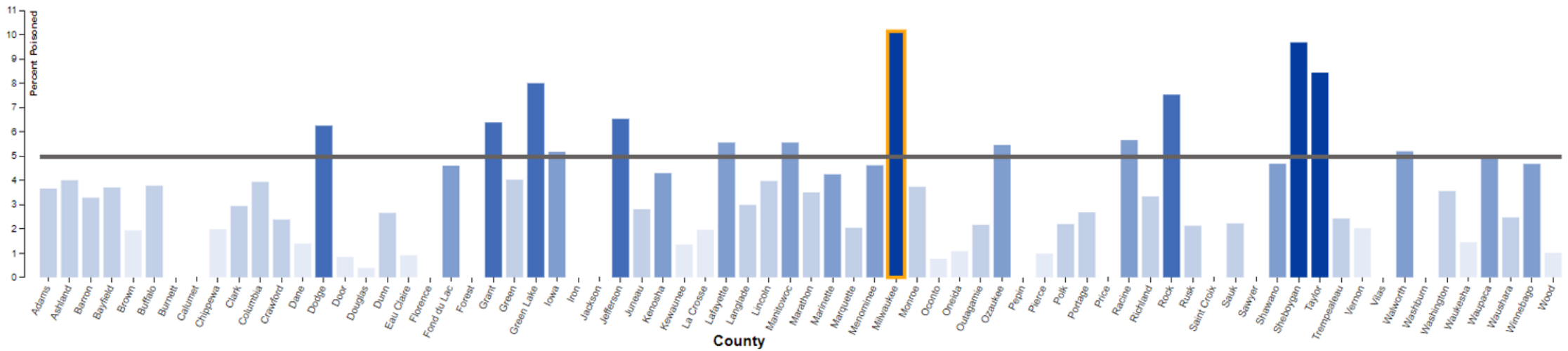


State average: 4.9675%

Legend - Percent Poisoned

- 6.09% to 8.12%
- 4.06% to < 6.09%
- 2.03% to < 4.06%
- 0% to < 2.03%
- Current selection
- Data not available
- Data suppressed
- Confidence intervals

Find out more information on the dataset.



The data are available in a table format too!

Click on column headings to sort table.

County	Number Tested	Number Poisoned	Percent Poisoned
Milwaukee	20662	2095	10.1394
Brown	2124	41	1.9303
Racine	1874	106	5.6564
Dane	1721	24	1.3945
Waukesha	1381	20	1.4482
Rock	983	74	7.528
Kenosha	931	40	4.2965

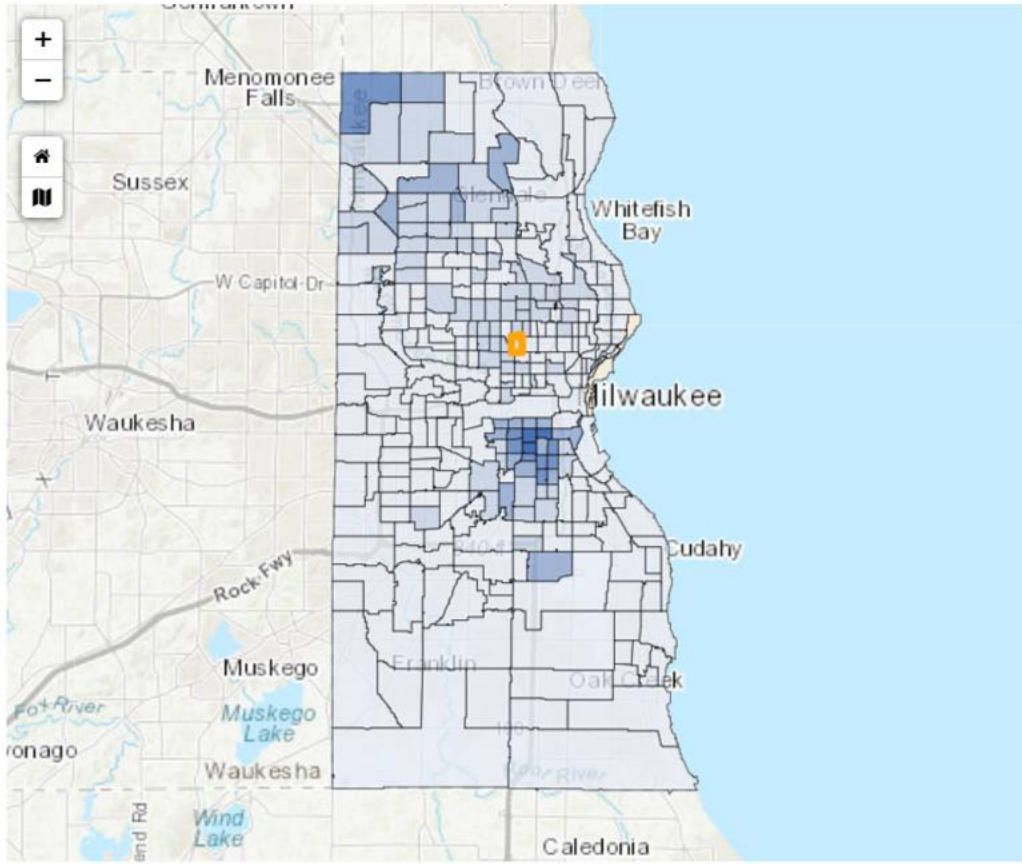
Environmental Public Health Data Tracker
Wisconsin Environmental Public Health Tracking Program

Map | Chart | Table | View All | Report Builder 0 | Resources

Childhood Lead Poisoning - Milwaukee - Blood lead level of >= 5µg/dL

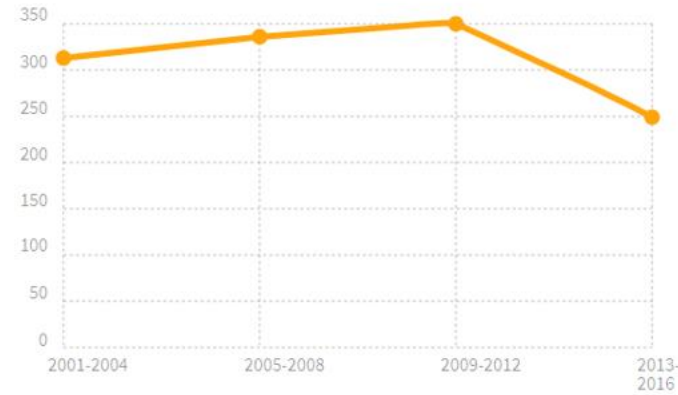
2013-2016 ~ <6 years ~ Number Tested

CHANGE DATASET | ADD TO REPORT



Tract 99 - Number Tested

Click on the graph points to filter the data to that year.



Legend - Number Tested

- 1,315.2 to 1,642
- 988.4 to < 1,315.2
- 661.6 to < 988.4
- 334.8 to < 661.6
- 8 to < 334.8
- Current selection
- Data not available
- Data suppressed
- Confidence intervals

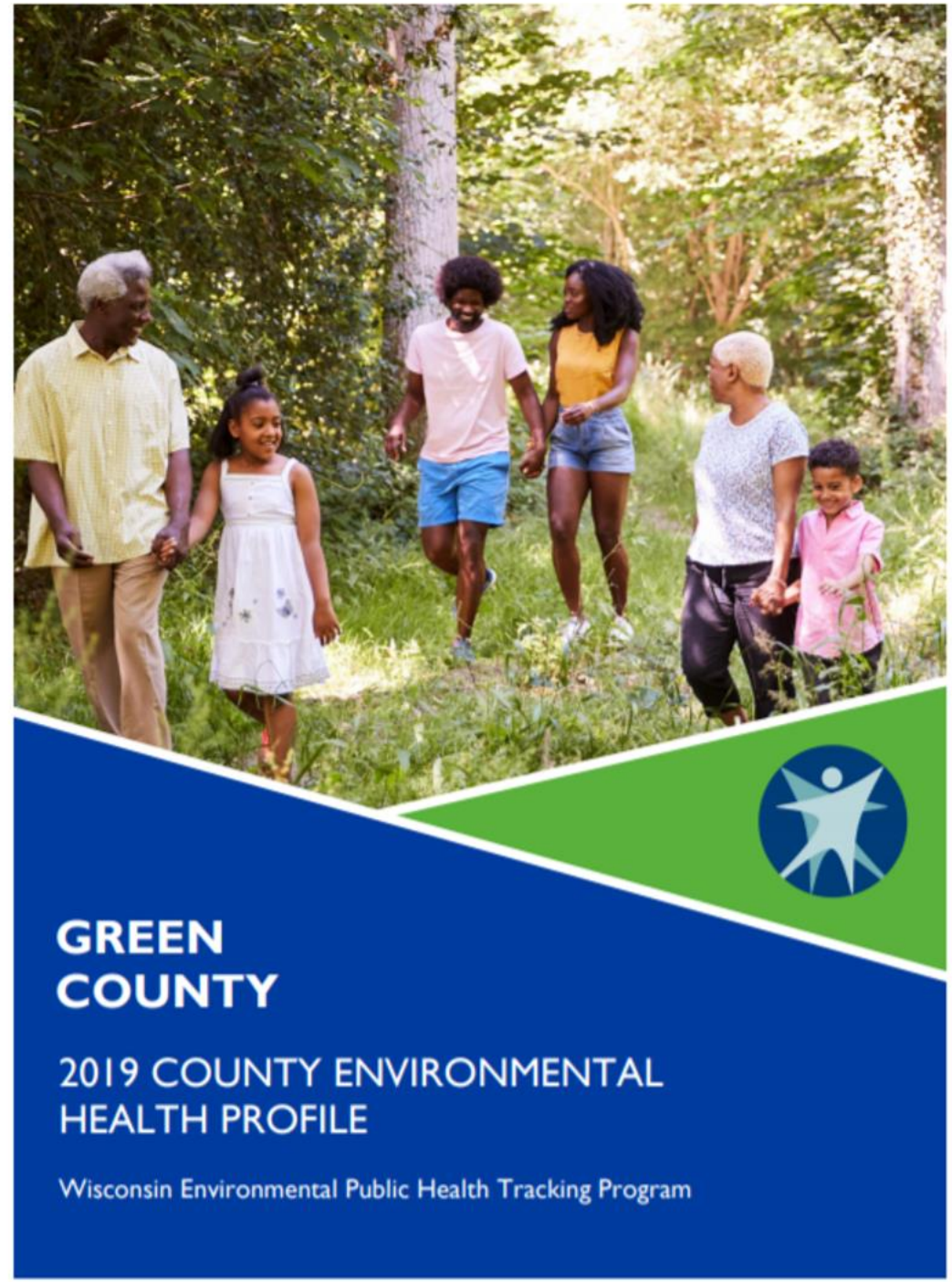
Find out more information on the dataset.

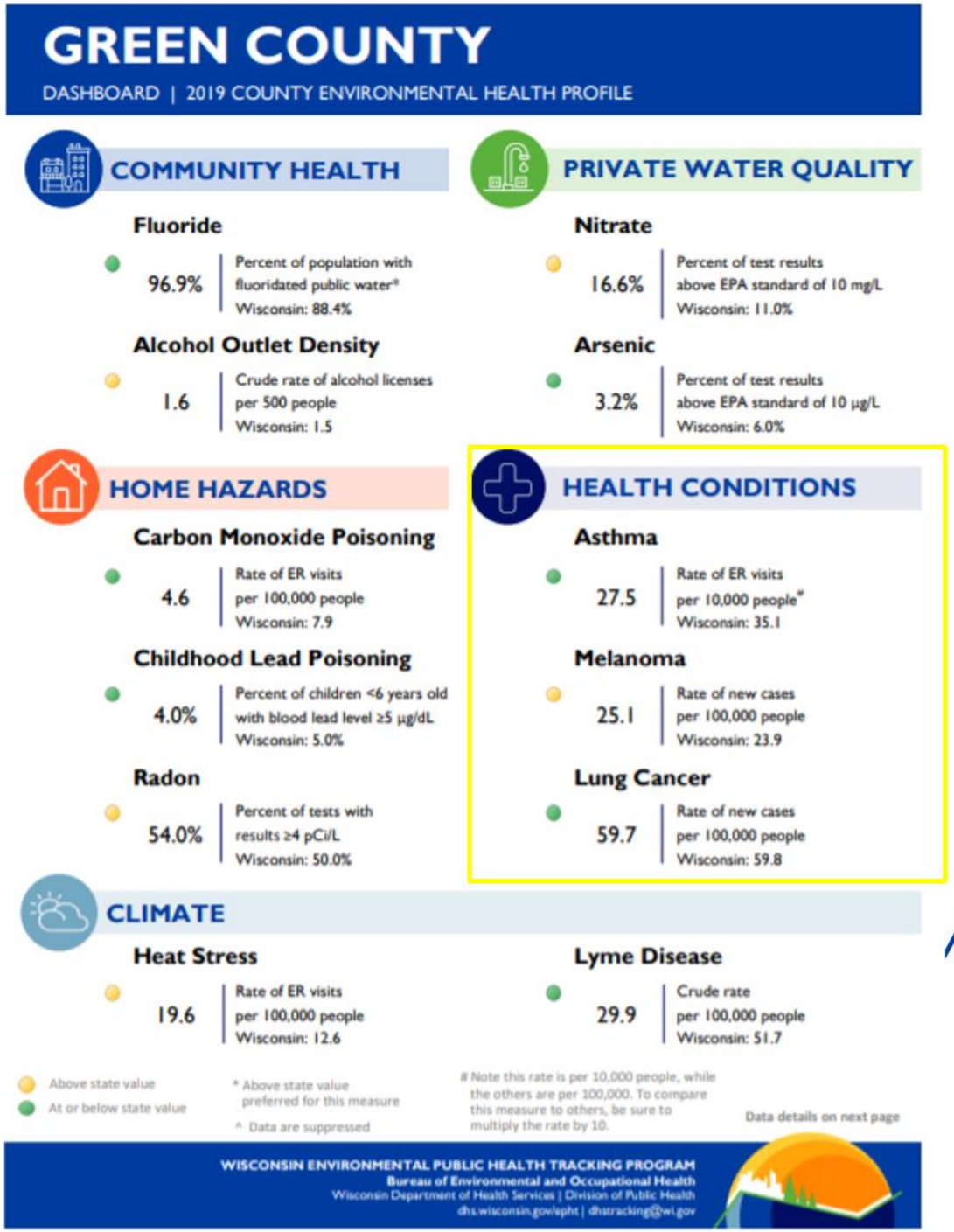
Map | Chart | Table | View All | Report Builder 0 | Resources

CHANGE DATASET | ADD TO REPORT

Making our Portal User-Friendly

County Environmental Health Profiles





GREEN COUNTY

DASHBOARD | 2019 COUNTY ENVIRONMENTAL HEALTH PROFILE

COMMUNITY HEALTH

Fluoride

96.9% — Percent of population with fluoridated public water*
Wisconsin: 88.4%

Alcohol Outlet Density

1.6 — Crude rate of alcohol licenses per 500 people
Wisconsin: 1.5

PRIVATE WATER QUALITY

Nitrate

16.6% — Percent of test results above EPA standard of 10 mg/L
Wisconsin: 11.0%

Arsenic

3.2% — Percent of test results above EPA standard of 10 µg/L
Wisconsin: 6.0%

HOME HAZARDS

Carbon Monoxide Poisoning

4.6 — Rate of ER visits per 100,000 people
Wisconsin: 7.9

Childhood Lead Poisoning

4.0% — Percent of children <6 years old with blood lead level ≥5 µg/dL
Wisconsin: 5.0%

Radon

54.0% — Percent of tests with results ≥4 pCi/L
Wisconsin: 50.0%

HEALTH CONDITIONS

Asthma

27.5 — Rate of ER visits per 10,000 people#
Wisconsin: 35.1

Melanoma

25.1 — Rate of new cases per 100,000 people
Wisconsin: 23.9

Lung Cancer

59.7 — Rate of new cases per 100,000 people
Wisconsin: 59.8

CLIMATE

Heat Stress

19.6 — Rate of ER visits per 100,000 people
Wisconsin: 12.6

Lyme Disease

29.9 — Crude rate per 100,000 people
Wisconsin: 51.7

Above state value
At or below state value

* Above state value preferred for this measure
^ Data are suppressed

Note this rate is per 10,000 people, while the others are per 100,000. To compare this measure to others, be sure to multiply the rate by 10.

Data details on next page

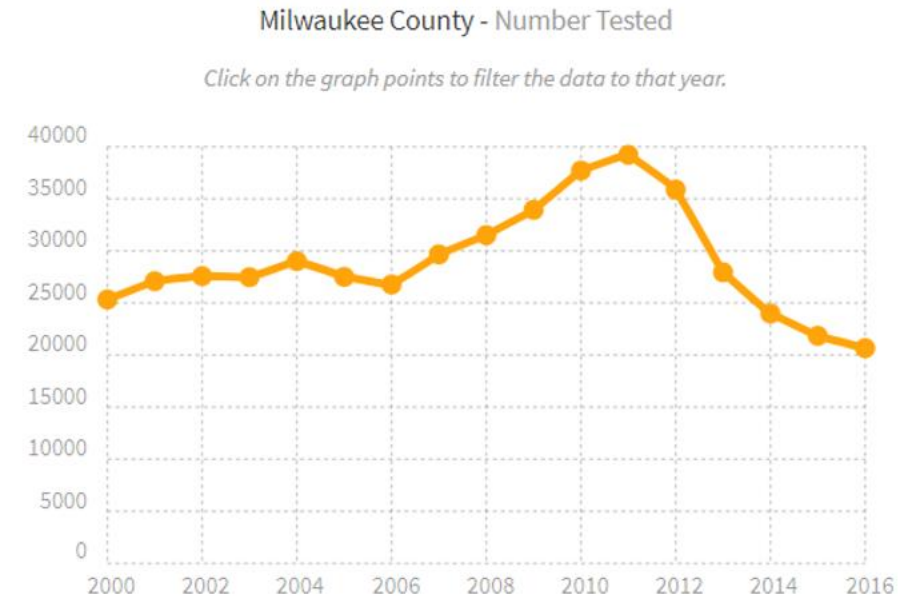
WISCONSIN ENVIRONMENTAL PUBLIC HEALTH TRACKING PROGRAM
Bureau of Environmental and Occupational Health
Wisconsin Department of Health Services | Division of Public Health
dhs.wisconsin.gov/epht | dhstracking@wi.gov

Dashboard

I work as a handout!

Portal data

Public health action



TAKING ACTION WITH DATA | 2015-2020

FUNDED PROJECTS

Bayfield County
2017 - Carbon Monoxide Poisoning
2019 - Lyme Disease

Burnett County
2015 - Carbon Monoxide Poisoning
2016 - Water Quality

Calumet County
2018 - Melanoma

City of Menasha
2018 & 2019 - Lead Poisoning

City of Milwaukee
2016 - Birth Outcomes/Pre-Term Birth

Clark County
2018 - Water Quality

Door County
2016 - Melanoma

Dunn County
2019 - Water Quality

Eau Claire County
2015 - Water Quality
2017 - Lyme Disease
2018 - Carbon Monoxide Poisoning

Florence & Marinette Counties
2015 - Water Quality

Fond du Lac County
2017 - Melanoma
2019 - Melanoma

Grant County
2015 - Heat Stress

Green Lake County
2019 - Water Quality

Iron County
2015 - Water Quality

Juneau, Adams, & Sauk Counties
2015 - Water Quality

La Crosse County
2017 - Water Quality

Lincoln County
2015 - Heat Stress

Marquette County
2018 - Water Quality

Monroe County
2016 - Melanoma
2019 - Water Quality

North Shore
2016 - Lead Poisoning

Portage County
2018 - Water Quality

Polk County
2017 - Carbon Monoxide Poisoning

Rock County
2015 & 2016 - Water Quality
2017 - Water Quality & Lead Poisoning
2019 - Lyme Disease

Walworth County
2016 - Lead Poisoning
2017 - Fluoride

Washburn County
2018 - Carbon Monoxide Poisoning

Waukesha County
2017 - Water Quality & Lead Poisoning

Waupaca County
2018 - Lead Poisoning

Mini-Grants

Mini-grant Success Stories

AN ENVIRONMENTAL PUBLIC HEALTH TRACKING STORY

CREATING A PUBLICLY ACCESSIBLE HOME LEAD RISKS DATABASE

Menasha, Wisconsin

THE PROBLEM

The City of Menasha has more than 7,500 housing units, more than half built before 1970. The age of these homes means they are likely to have at least some lead-based paint, which creates a health hazard. The City of Menasha is federally designated as a low income, medically underserved population and some residents are financially unable to fix lead issues. Using Wisconsin Environmental Public Health Tracking Program data, Menasha Health Department staff identified several census tracts where childhood lead poisoning rates were near or above the Wisconsin average.

THE HEALTH DEPARTMENT'S SOLUTION

Health department staff wanted to make it easier for residents to find and understand lead risk information. Staff had access to the Home Lead Risks database which included information about the age of homes, known renovation dates for homes, the city water service type, and the private water lateral type. However, this information was difficult to query and it was not publicly available. Health department staff worked with an IT consultant to integrate the Menasha Home Lead Risks database into their agency website, making it available to the public for the first time. The improved database gives staff and other users more comprehensive lead poisoning prevention information, including how to clean and minimize the impact of lead paint in the home.

THE PUBLIC HEALTH IMPACT

Since many City of Menasha residents are unable to afford high-cost lead remediation, it is critical they know if their home has a lead risk and the steps to take to be safe around lead. The database and its health education information are housed in the same place, making it easier and more convenient for both staff and residents to use. Menasha Health Department staff are actively promoting the database with clients at their clinic, partner agencies, and health professionals in the area.

EXPLORE YOUR COUNTY'S LEAD POISONING DATA:

dhs.wisconsin.gov/epht

WISCONSIN ENVIRONMENTAL PUBLIC HEALTH TRACKING PROGRAM
Bureau of Environmental and Occupational Health

dhs.wisconsin.gov/epht | OCTOBER 2019 | dhstracking@wi.gov
Department of Health Services | Division of Public Health | P-02514 (10/2019)
This project funded by the Tracking team's *Taking Action with Data* program.

SURVEILLANCE BRIEF

Wisconsin Environmental Public Health Tracking Program REV. FEBRUARY 2019

HEALTH DISPARITIES IN WISCONSIN HOSPITALIZATIONS FOR ASTHMA

By Paul D. Creswell, PhD[1,2,3]; Christy Vogt, MPH, CHES[1,2]; Megan Christenson, MS, MPH[1,2,3]; Carrie Tomasallo, PhD, MPH[1,4]

[1]Wisconsin Department of Health Services, Bureau of Environmental and Occupational Health;
[2]Wisconsin Environmental Public Health Tracking Program;
[3]University of Wisconsin-Madison, Department of Population Health Sciences;
[4]Wisconsin Asthma Program

SUMMARY - Asthma is a chronic disease that causes substantial disease burden in Wisconsin. Certain groups are more likely to be affected by asthma. Black and American Indian/Alaska Native populations experience asthma hospitalization rates that are significantly higher than rates for white populations in Wisconsin.

Asthma hospitalizations can be reduced by implementing individual- and community-level strategies. Self-management strategies include adhering to medication recommendations, avoiding known asthma triggers, and controlling asthma symptoms.

Asthma self-efficacy may be increased by creating asthma action plans and improving the cultural competency of asthma educational materials. Community programs to improve indoor air quality can help reduce asthma symptoms and may decrease asthma-related hospitalizations.

BACKGROUND

Asthma is a chronic inflammatory disease characterized by intermittent wheezing, chest tightness, and shortness of breath that can limit an individual's ability to bring oxygen into the lungs, making breathing difficult.[1] While asthma cannot be cured, it can be controlled by self-management strategies such as the regular use of controller medications, receiving an annual influenza immunization, and avoiding exposure to triggers such as cigarette smoke. Incorporating such self-management strategies into an asthma action plan can be a very effective approach to keeping asthma appropriately controlled.

Asthma affects 12% of Wisconsin adults and 11% of Wisconsin children,[2] and resulted in 5,111 hospitalizations and 21,382 emergency department visits in 2014.[3] While asthma affects individuals throughout Wisconsin, some groups are more likely to be

Surveillance Briefs

Tracking: Home
Topics & Data
County Profiles
Ideas for Taking Action
Data Details & Glossary
Training
Resources

Environmental Public Health Tracking: Resources and Publications

Find newsletters, surveillance briefs, success stories, publications, and more on this page from the Wisconsin Environmental Public Health Tracking Program.

Resources | Success Stories | Publications

Newsletters

- January 2020
- September 2019
- June 2019
- October 2018

Surveillance briefs

- Extreme Cold in Wisconsin: Trends, Surveillance, and Prevention, P-02577 (PDF)
- Extreme Heat: Who's at Highest Risk, P-02386 (PDF)
- What's in Your Water? A Look at Private Well Water Quality in Wisconsin, P-01830 (PDF)
- Health Disparities in Wisconsin Hospitalizations for Asthma,

Keep in Touch

dhstracking@wi.gov

TRACKING 101

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TCEQ's Emissions Events Database

Cynthia Gandee

Special Assistant, Coastal and East Texas Area,
Office of Compliance and Enforcement
Texas Commission on Environmental Quality

TCEQ's Emissions Events Database

Environmental Justice Webinar

2020

Programmatic context

TCEQ Regulations require that certain events be reported within 24 hours

- These are unauthorized air releases
- Companies report the information to TCEQ
- TCEQ reviews all incidents reported
- Reports are publicly available

Historical context

1997

Prior to 1997, all “major upset” required reporting

2001

In 2001, statutory text added during the 77th Legislative Session in Tex. Health & Safety Code § 382.0215 (HB 2912)

- required reports within 24 hours
- bill focused on transparency

1997

Texas Administrative Code, Chapter 101 was amended in 1997 to use reportable/non-reportable concept

2003

Electronic reporting fully implemented in 2003

Changes over Time

Electronic reporting enabled public database

Users include

- Public at large
- Non-governmental organizations
- Media
- Internal users

Enhancement requests were received

Met with external stakeholders

TCEQ public site

https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.searchForm&newsearch=yes

Search by Incident Number

Incident Number: Search

Search by Other Criteria

Please provide at least one search criteria to identify the air emission reports of interest to you. You may not specify a date prior to 01/31/2003. All dates should be entered as MM/DD/YYYY format.

Event Start Date Range: To (MM/DD/YYYY)

Event End Date Range: To (MM/DD/YYYY)

CN: (CN+9-digits)

Customer Name:

RN: (RN+9-digits)

Regulated Entity Name:

County:
- --ALL--
- ANDERSON
- ANDREWS
- ANGELINA
- ARANSAS

Region: --ALL--

Event Type:
- --ALL--
- AIR SHUTDOWN
- AIR STARTUP
- EMISSIONS EVENT
- EXCESS OPACITY

☐ **Use Full Wildcard for name fields**

Search Clear

https://www2.tceq.texas.gov/#rn - Glossary - Internet Explorer

Type	Description
EMISSIONS EVENT	Any upset event or unscheduled maintenance, startup, or shutdown activity, from a common cause that results in unauthorized emissions of air contaminants from one or more emissions points at a regulated entity (30 TAC §101.1(28)).
EXCESS OPACITY	When an opacity reading is equal to or exceeds 15 additional percentage points above an applicable opacity limit, averaged over a six-minute period (30 TAC §101.1(32)).
AIR SHUTDOWN AIR STARTUP MAINTENANCE	Activities with unauthorized emissions that are expected to exceed a reportable quantity (RQ), and the owner or operator provides prior notice and a final report as required by 30 TAC §101.211. For a complete definition, see 30 TAC

Your search returned 24 records. You may also view and save this list with additional fields (county, region) as an Excel spreadsheet.

1-24 of 24 Records

Incident #	RN	RE Name	Began	Ended	Event Type	Report Type	Report Date	Associated Customer
339871	RN100212109	TOTAL PETROCHEMICALS USA LA PORTE PLANT	07/30/2020 05:55 PM	07/30/2020 08:30 PM	EMISSIONS EVENT	FINAL	08/13/2020	CN600582399 TOTAL PETROCHEMICALS & REFINING USA INC
339707	RN100542281	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	07/29/2020 09:00 AM	07/29/2020 03:00 PM	EMISSIONS EVENT	FINAL	08/03/2020	CN600124705 EQUISTAR CHEMICALS LP
339665	RN100716661	PASADENA REFINING SYSTEM PRSI	07/27/2020 05:24 PM	07/27/2020 05:54 PM	EMISSIONS EVENT	FINAL	08/10/2020	CN603137605 PASADENA REFINING SYSTEM INC
339664	RN100210665	MORGANS POINT COMPLEX	07/27/2020 07:30 PM	07/28/2020 12:00 AM	EMISSIONS EVENT	FINAL	08/07/2020	CN603211277 ENTERPRISE PRODUCTS OPERATING LLC
339650	RN100210806	INTERCONTINENTAL TERMINALS DEER PARK TERMINAL	07/27/2020 04:30 PM	07/27/2020 06:50 PM	EMISSIONS EVENT	INITIAL	07/28/2020	CN601470222 INTERCONTINENTAL TERMINALS COMPANY LLC
339527	RN110461415	RAVEN PLANT	07/25/2020 09:46 AM	07/25/2020 10:34 AM	EMISSIONS EVENT	FINAL	08/06/2020	CN604933655 RAVEN BUTENE-1

	A	B	C	D	E
1	INCIDENT NO.	RN	RE NAME	START DATE/TIME	END DATE/TIME
2	339871	RN100212109	TOTAL PETROCHEMICALS USA LA PORTE PLANT	07/30/2020 05:55 PM	07/30/2020 08:30 PM
3	339707	RN100542281	EQUISTAR CHEMICALS CHANNELVIEW COMPLEX	07/29/2020 09:00 AM	07/29/2020 03:00 PM
4	339665	RN100716661	PASADENA REFINING SYSTEM PRSI	07/27/2020 05:24 PM	07/27/2020 05:54 PM
5	339664	RN100210665	MORGANS POINT COMPLEX	07/27/2020 07:30 PM	07/28/2020 12:00 AM
6	339650	RN100210806	INTERCONTINENTAL TERMINALS DEER PARK TERMINAL	07/27/2020 04:30 PM	07/27/2020 06:50 PM
7	339527	RN110461415	RAVEN PLANT	07/25/2020 09:46 AM	07/25/2020 10:34 AM
8	339517	RN100716661	PASADENA REFINING SYSTEM PRSI	07/23/2020 11:48 PM	07/24/2020 08:30 PM
9	339506	RN100217207	LYONDELLBASELL SYNGAS	07/23/2020 05:42 PM	07/24/2020 06:25 AM

REPORT TYPE	REPORT DATE	EVENT TYPE	ASSOCIATED CUSTOMER	COUNTY	TCEQ REGION
FINAL	08/13/2020	EMISSIONS EVENT	CN600582399 TOTAL PETROCHEMICALS & REFINING USA INC	HARRIS	REGION 12 - HOUSTON
FINAL	08/03/2020	EMISSIONS EVENT	CN600124705 EQUISTAR CHEMICALS LP	HARRIS	REGION 12 - HOUSTON
FINAL	08/10/2020	EMISSIONS EVENT	CN603137605 PASADENA REFINING SYSTEM INC	HARRIS	REGION 12 - HOUSTON
FINAL	08/07/2020	EMISSIONS EVENT	CN603211277 ENTERPRISE PRODUCTS OPERATING LLC	HARRIS	REGION 12 - HOUSTON
INITIAL	07/28/2020	EMISSIONS EVENT	CN601470222 INTERCONTINENTAL TERMINALS COMPANY LLC	HARRIS	REGION 12 - HOUSTON
FINAL	08/06/2020	EMISSIONS EVENT	CN604933655 RAVEN BUTENE-1 LLC	HARRIS	REGION 12 - HOUSTON
FINAL	08/07/2020	EMISSIONS EVENT	CN603137605 PASADENA REFINING SYSTEM INC	HARRIS	REGION 12 - HOUSTON
FINAL	08/06/2020	EMISSIONS EVENT	CN603674862 LYONDELLBASELL ACETYLS LLC	HARRIS	REGION 12 - HOUSTON

Event/Activity Type:	EMISSIONS EVENT
Date and Time Event Discovered or Scheduled Activity Start:	07/14/2020 12:41 AM
Date and Time Event or Scheduled Activity Ended:	07/14/2020 06:00 PM
Event Duration:	17 hours, 19 minutes

Process Unit or Area Common Names
EVAL Business Unit

Facility Common Name	**Facility Identification Number (FIN)**
Flare	FL8432
Fugitive Emission Units	AREA 4

1 - Emission Point Common Name:	**Emission Point Number:**
Flare	400

List of Air Contaminant Compounds - 6 total

Description	**Est. Quantity/ Opacity**	**Units**	**Emission Limit**	**Units**	**Authorization**
Carbon Monoxide	161.3	POUNDS	14.27	LBS/HR	9576
Ethylene (gaseous)	66.0	POUNDS	23.9	LBS/HR	9576
Methanol	423.6	POUNDS	23.9	LBS/HR	9576
Methyl Acetate	77.0	POUNDS	0.74	LBS/HR	9576
NOX	31.7	POUNDS	2.98	LBS/HR	9576
Vinyl acetate	161.5	POUNDS	23.9	LBS/HR	9576

	A	B	C	D	E	F	G
1	INCIDENT NO.	RN	RE NAME	PHYSICAL LOCATION	COUNTY	TCEQ REGION	START DATE/TIME
2	339072	RN100212216	EVAL BUSINESS UNIT	11500 BAY AREA BLVD; PASADENA, TX 77507	HARRIS	12	07/14/2020 00:41
3	339072	RN100212216	EVAL BUSINESS UNIT	11500 BAY AREA BLVD; PASADENA, TX 77507	HARRIS	12	07/14/2020 00:41
4	339072	RN100212216	EVAL BUSINESS UNIT	11500 BAY AREA BLVD; PASADENA, TX 77507	HARRIS	12	07/14/2020 00:41
5	339072	RN100212216	EVAL BUSINESS UNIT	11500 BAY AREA BLVD; PASADENA, TX 77507	HARRIS	12	07/14/2020 00:41
6	339072	RN100212216	EVAL BUSINESS UNIT	11500 BAY AREA BLVD; PASADENA, TX 77507	HARRIS	12	07/14/2020 00:41
7	339072	RN100212216	EVAL BUSINESS UNIT	11500 BAY AREA BLVD; PASADENA, TX 77507	HARRIS	12	07/14/2020 00:41
8	339072	RN100212216	EVAL BUSINESS UNIT	11500 BAY AREA BLVD; PASADENA, TX 77507	HARRIS	12	07/14/2020 00:41
9	339072	RN100212216	EVAL BUSINESS UNIT	11500 BAY AREA BLVD; PASADENA, TX 77507	HARRIS	12	07/14/2020 00:41
10	339072	RN100212216	EVAL BUSINESS UNIT	11500 BAY AREA BLVD; PASADENA, TX 77507	HARRIS	12	07/14/2020 00:41

	J	K	L	M	N	O	P	Q	R
	EMISSION POINT NAME	EPN	CONTAMINANT	EST QUANTITY/OPACITY	ESTIMATED IND	AMOUNT UNK IND	UNITS	EMISSION LIMIT	LIMIT UNITS
	Flare	400	Carbon Monoxide	161.3	YES	NO	POUNDS	14.27	LBS/HR
	Flare	400	Ethylene (gaseous)	66	YES	NO	POUNDS	23.9	LBS/HR
	Flare	400	Methanol	423.6	YES	NO	POUNDS	23.9	LBS/HR
	Flare	400	Methyl Acetate	77	YES	NO	POUNDS	0.74	LBS/HR
	Flare	400	NOX	31.7	YES	NO	POUNDS	2.98	LBS/HR
	Flare	400	Vinyl acetate	161.5	YES	NO	POUNDS	23.9	LBS/HR
	Fugitive VOC	Area4	Methanol	1622	YES	NO	POUNDS	1.54	LBS/HR
	Fugitive VOC	Area4	Methyl Acetate	108	YES	NO	POUNDS	0	
	Fugitive VOC	Area4	Vinyl acetate	1622	YES	NO	POUNDS	1.54	LBS/HR

Other search features:

- Searching by name may take more processing time
  - Example - Dow as RN name
    - sort began column goes back to 2003
    - sort by RN shows other sites
  - Also can use wildcard search box
    - Shows sites where “Dow” appears anywhere in name, not just beginning
- Date picker back to 2003
  - beginning of electronic reporting

RSS Data Feed for Air Emission Events in Texas

You are viewing a feed that contains frequently updated content. When you subscribe to a feed, it is added to the Common Feed List. Updated information from the feed is automatically downloaded to your computer and can be viewed in Internet Explorer and other programs. Learn more about feeds.

Subscribe to this feed

Displaying 70 / 70

All 70

Sort by:

Date
Title

336606 - RN100225291 OWENS CORNING ROOFING AND ASPHALT IRVING FACILITY

Today, June 5, 2020, 7 hours ago

RN100225291 OWENS CORNING ROOFING AND ASPHALT IRVING FACILITY

336593 - RN100220565 MCALISTER BOOSTER STATION

Yesterday, June 4, 2020, 7:00:00 PM

RN100220565 MCALISTER BOOSTER STATION

336591 - RN101621449 STRYKER CREEK STEAM ELECTRIC STATION

Yesterday, June 4, 2020, 2:10:00 PM

RN101621449 STRYKER CREEK STEAM ELECTRIC STATION

336601 - RN110448834 BTT EPIC FRAC

Yesterday, June 4, 2020, 2:09:00 PM

RN110448834 BTT EPIC FRAC

336627 - RN105753008 WFMU SATELLITE NO 5 OIL AND GAS PRODUCTION FACILITY

Instructions

- https://www3.tceq.texas.gov/steers/help/aeme/create.html
- https://www.tceq.texas.gov/assets/public/compliance/field_ops/fod_forms/upset/eefguide.pdf

Other reporting requirements

- Emissions Inventory
- Annual Enforcement Report
- Toxics Release Inventory

Annual Enforcement Report

Figure 5-1: Total Number of Incidents Reported Statewide

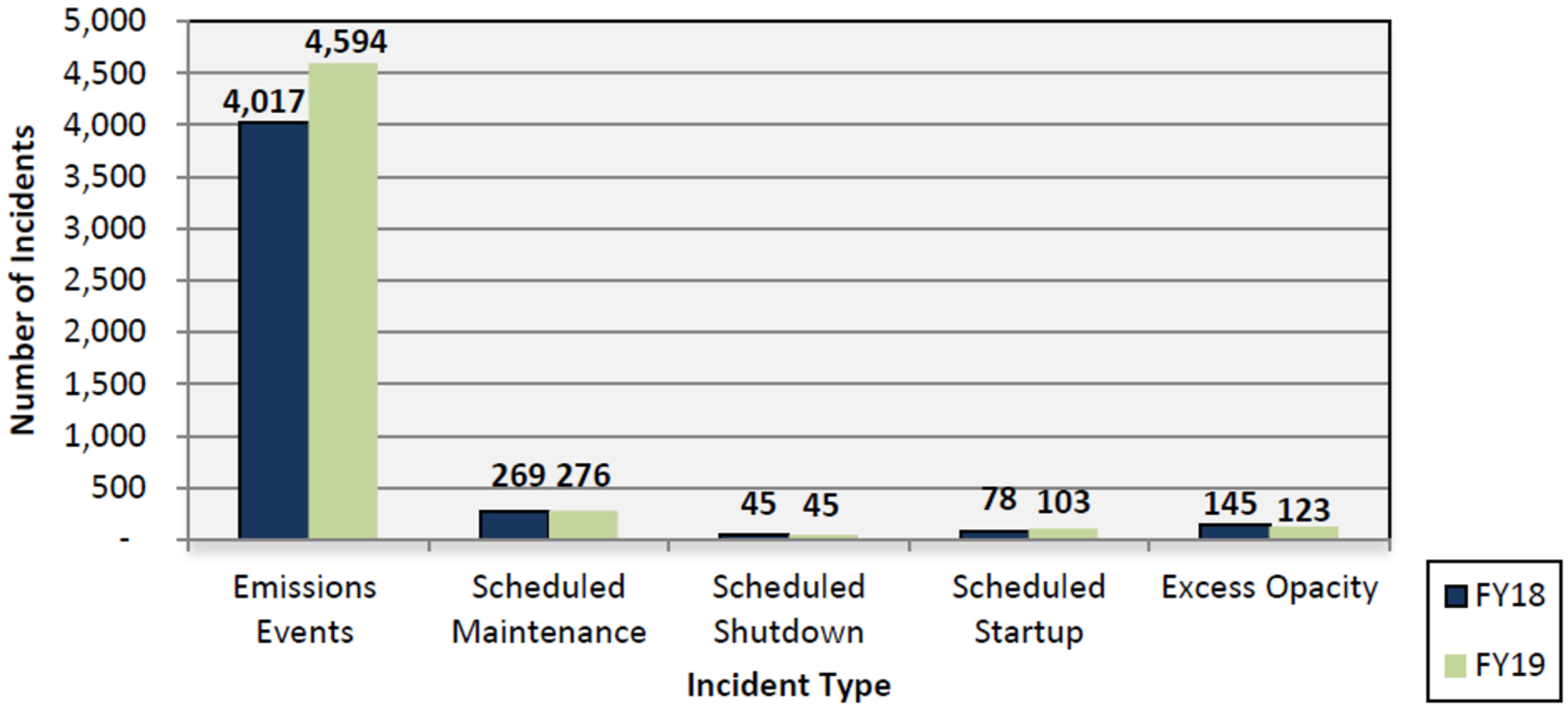
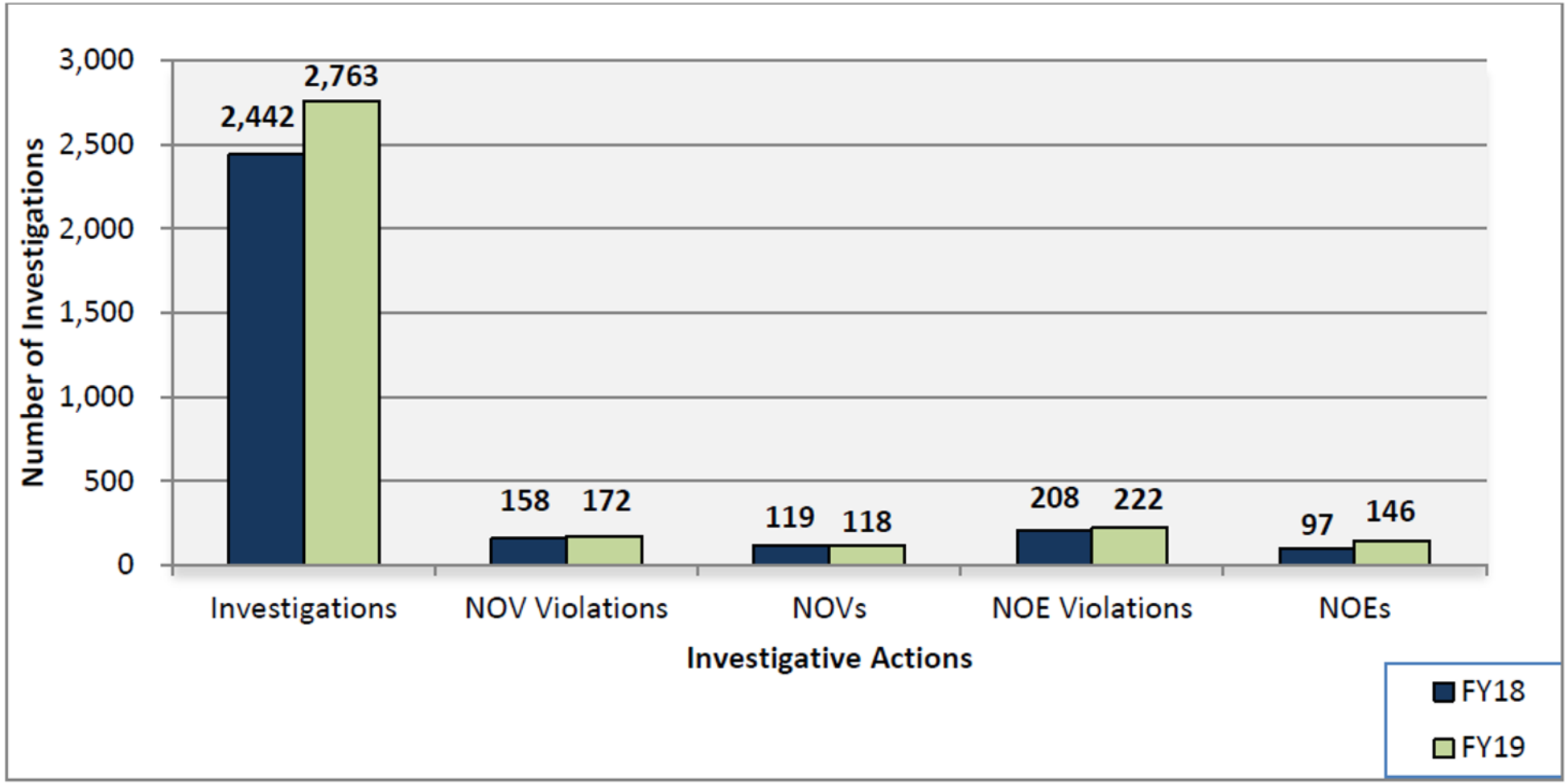
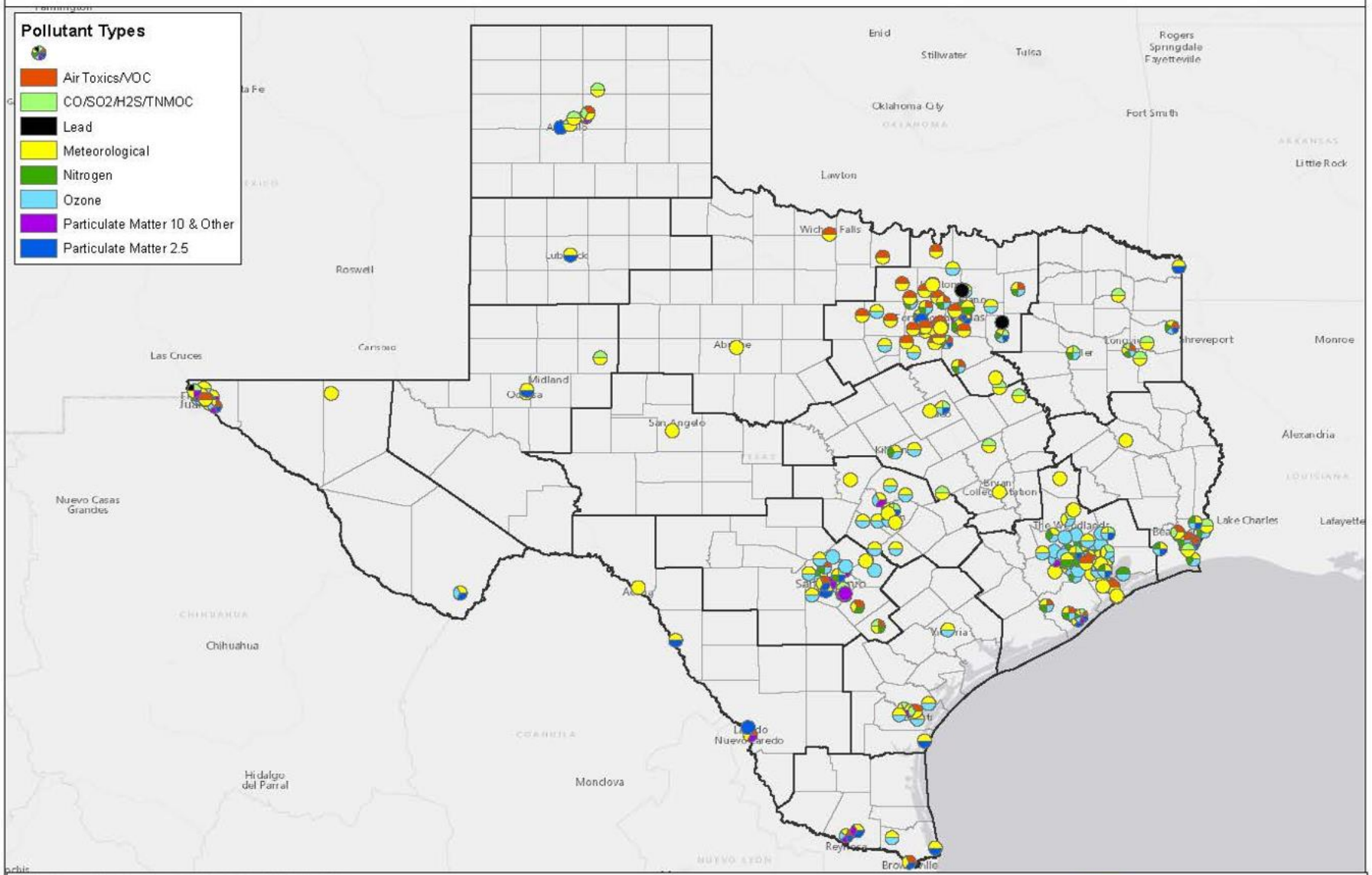


Figure 5-5: Incident Investigations



Air Quality Successes

Ambient Air Monitors for the State of Texas

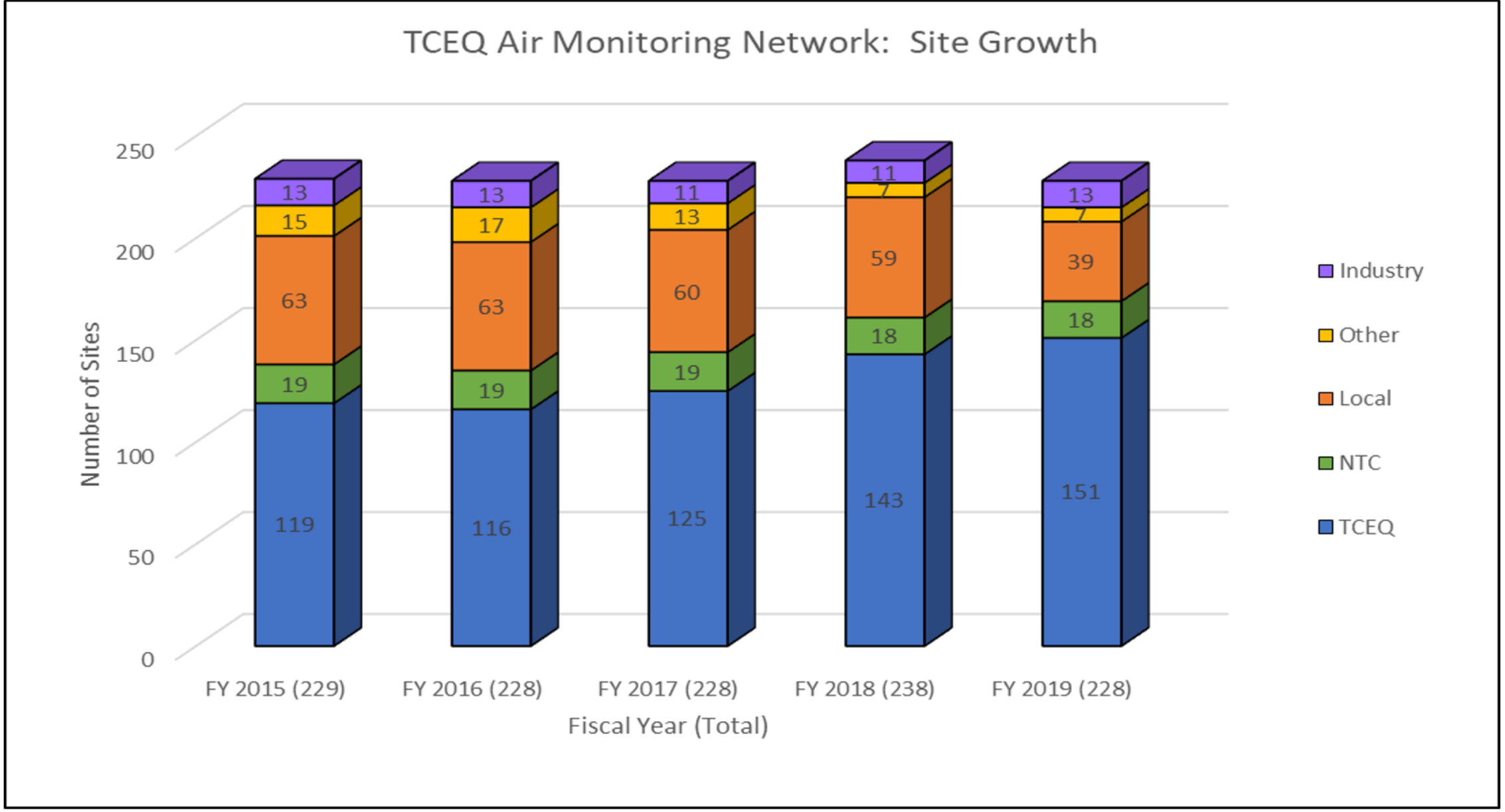


This map was generated by the Office of Compliance and Enforcement, Monitoring Division of the Texas Commission on Environmental Quality and is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location as of Thursday, January 24, 2019 for property boundaries. For information concerning this map, contact the Monitoring Division at (512) 239-1716.

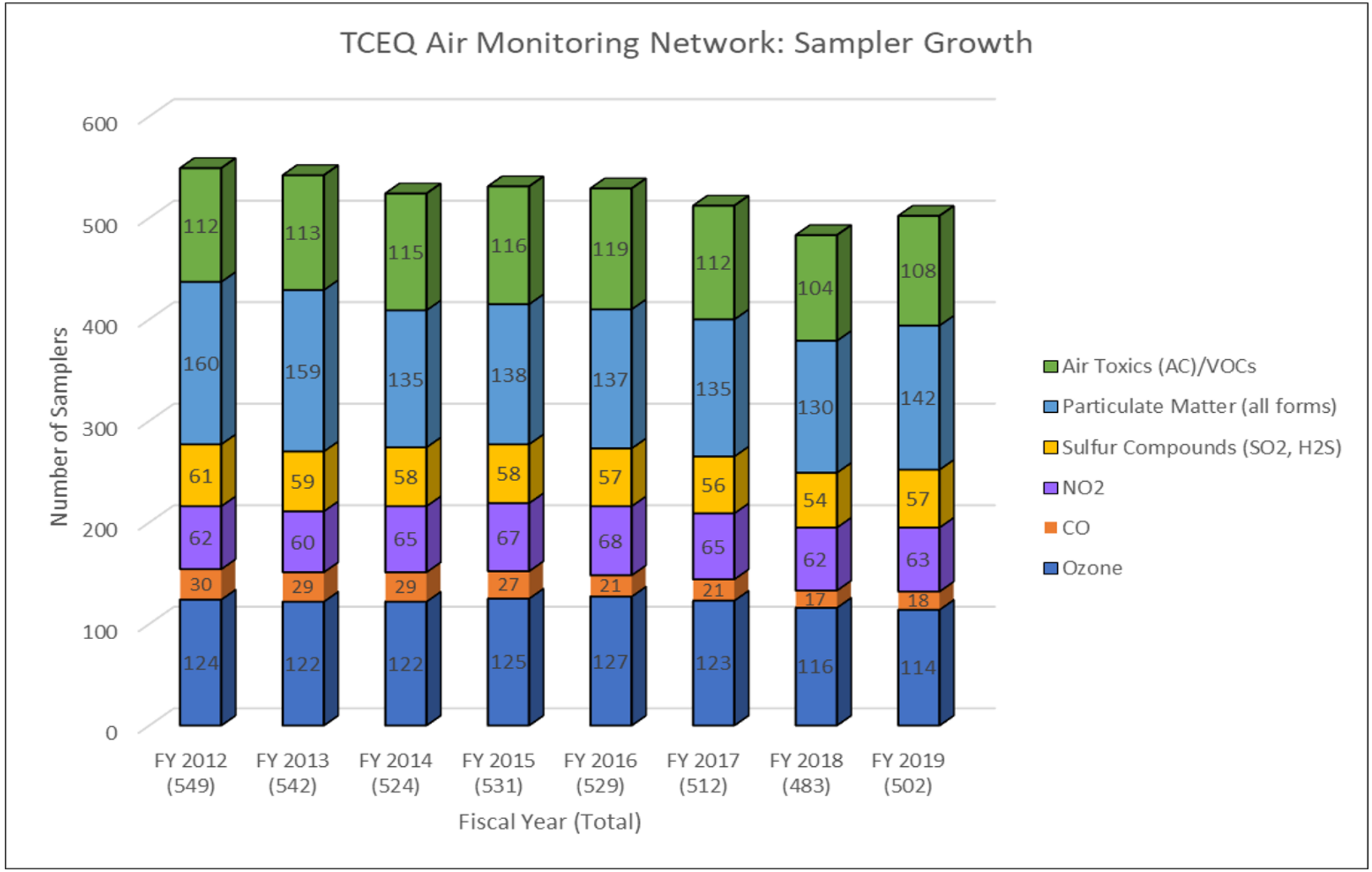
Texas Commission on Environmental Quality
Office of Compliance and Enforcement
Monitoring Division
PO Box 13087
Austin, Texas 78711-3087

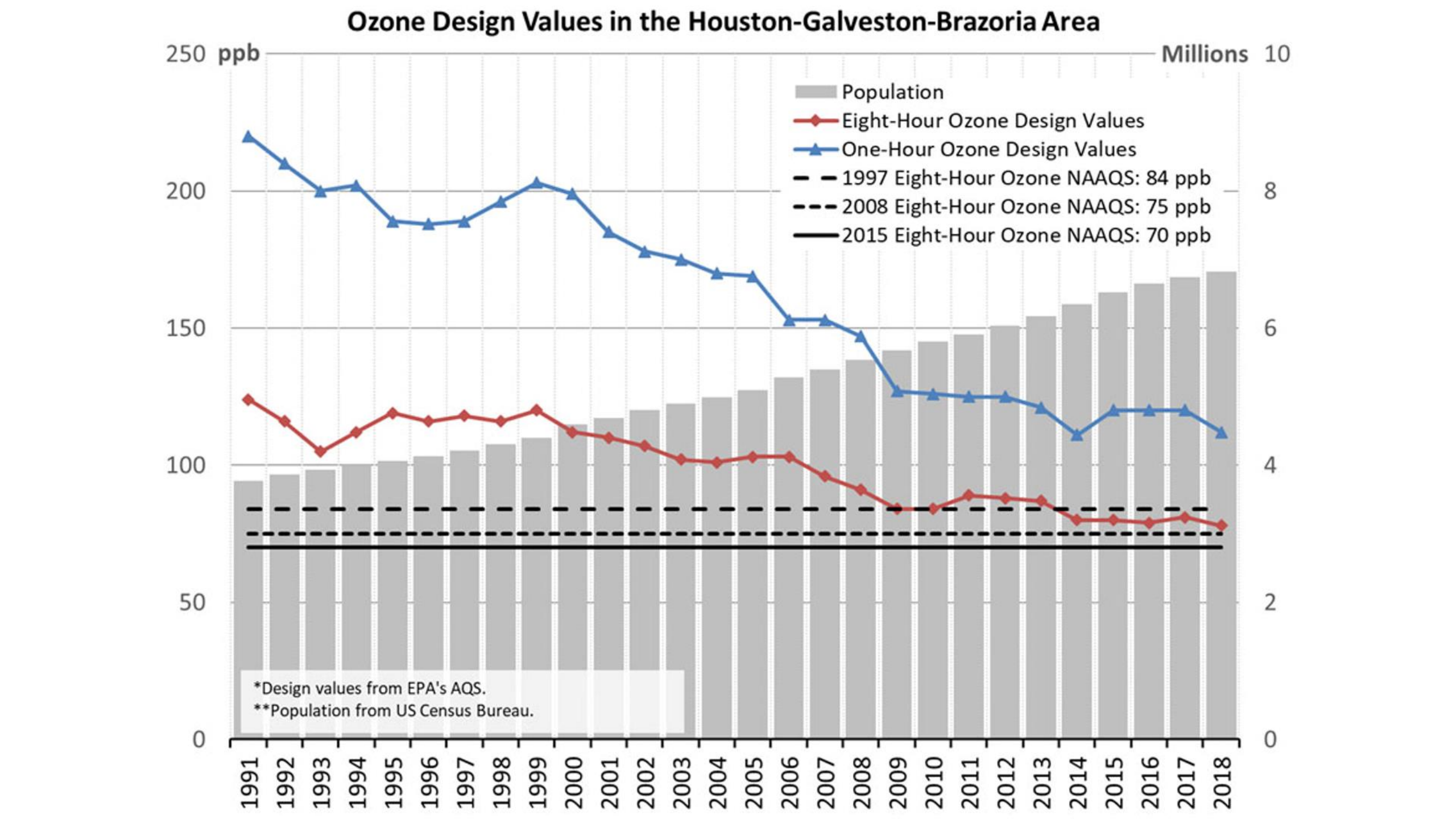
TCEQ

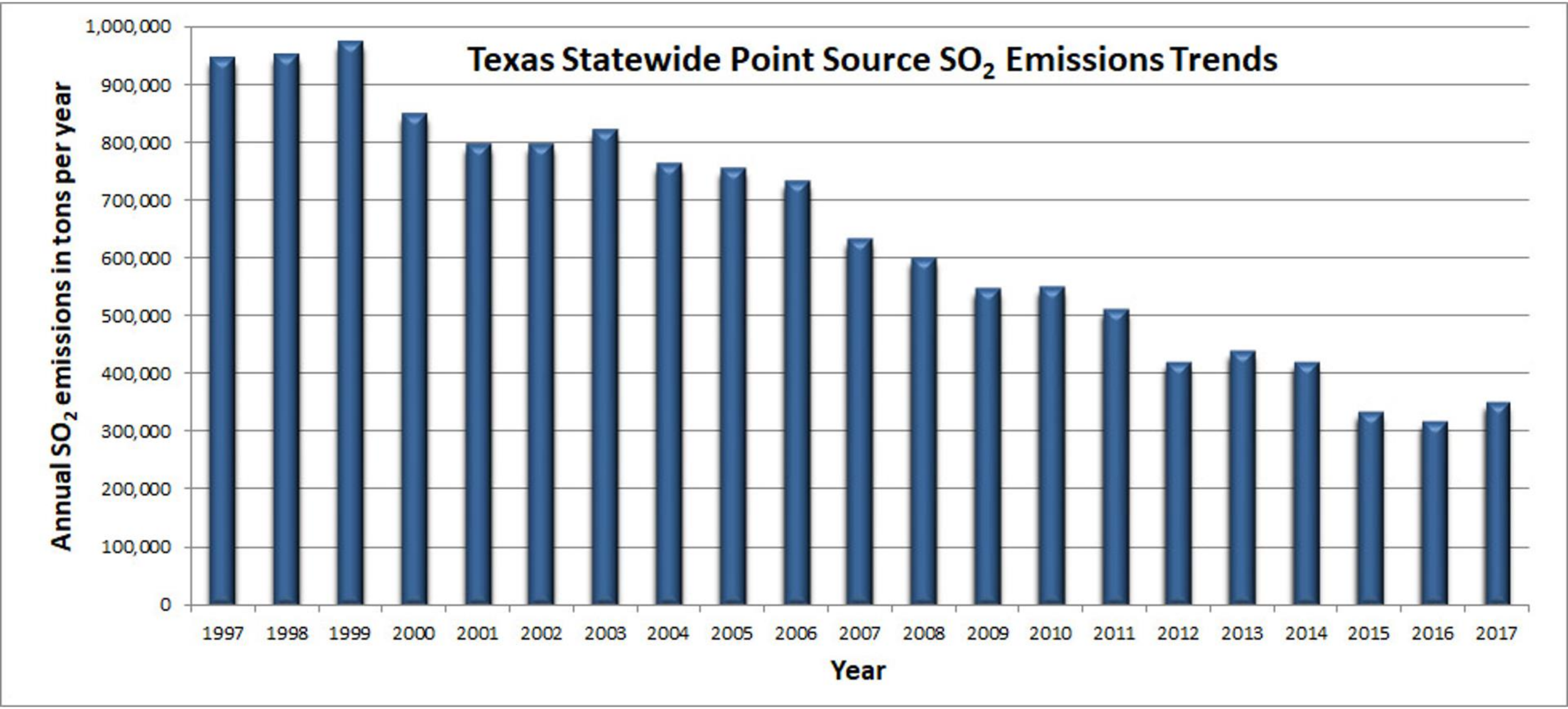
Thursday, January 24, 2019

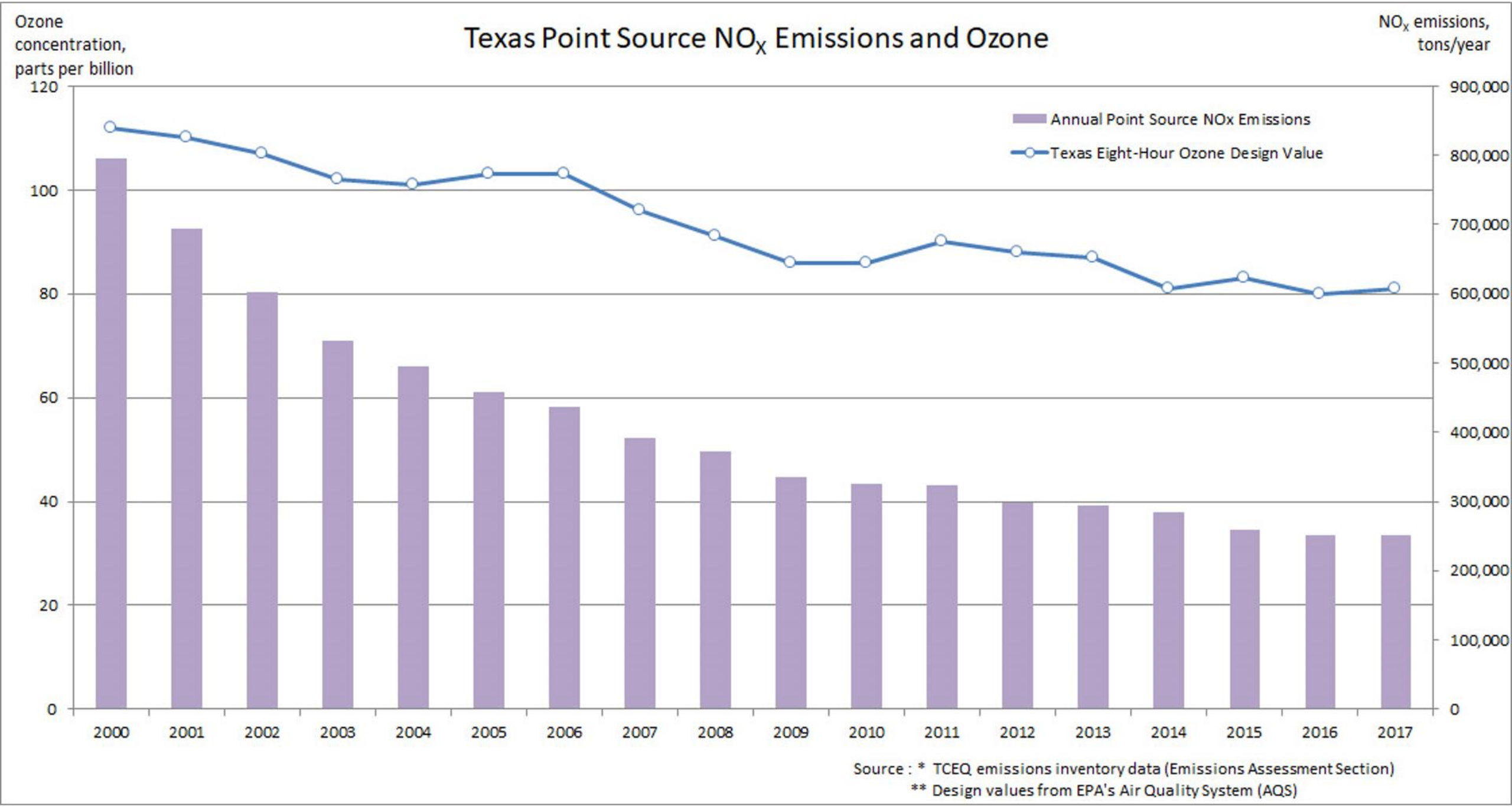


Local: City, County, COG
Other: EPA, Federal, Other, Private, Tribal, University
Meteorological-only sites are not represented in the charts of counts above or below.

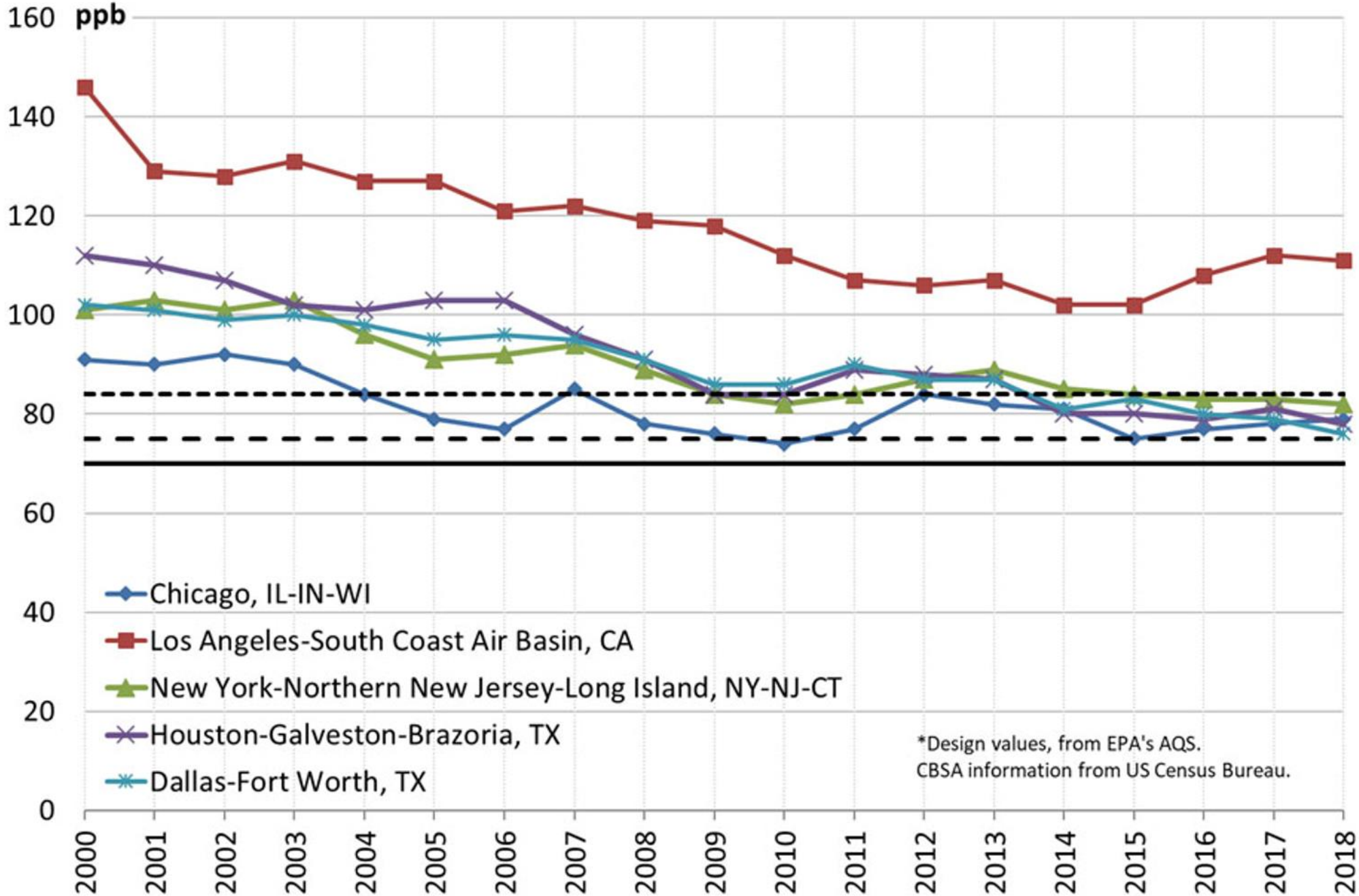

TCEQ Air Monitoring Network: Sampler Growth
Number of Samplers
600
500
400
300
200
100
0
112
160
61
62
30
124
113
159
59
60
29
122
115
135
58
65
29
122
116
138
58
67
27
125
119
137
57
68
21
127
112
135
56
65
21
123
104
130
54
62
17
116
108
142
57
63
18
114
FY 2012 (549)
FY 2013 (542)
FY 2014 (524)
FY 2015 (531)
FY 2016 (529)
FY 2017 (512)
FY 2018 (483)
FY 2019 (502)
Fiscal Year (Total)
Air Toxics (AC)/VOCs
Particulate Matter (all forms)
Sulfur Compounds (SO2, H2S)
NO2
CO
Ozone


Ozone Design Values in the Houston-Galveston-Brazoria Area
250 ppb
200
150
100
50
0
Millions
10
8
6
4
2
0
Population
Eight-Hour Ozone Design Values
One-Hour Ozone Design Values
1997 Eight-Hour Ozone NAAQS: 84 ppb
2008 Eight-Hour Ozone NAAQS: 75 ppb
2015 Eight-Hour Ozone NAAQS: 70 ppb
*Design values from EPA's AQS.
**Population from US Census Bureau.
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018


Texas Statewide Point Source SO_2 Emissions Trends
Annual SO_2 emissions in tons per year
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
Year


Texas Point Source NOX Emissions and Ozone
Ozone concentration, parts per billion
NOX emissions, tons/year
Annual Point Source NOx Emissions
Texas Eight-Hour Ozone Design Value
120
100
80
60
40
20
0
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
Source : * TCEQ emissions inventory data (Emissions Assessment Section)
** Design values from EPA's Air Quality System (AQS)

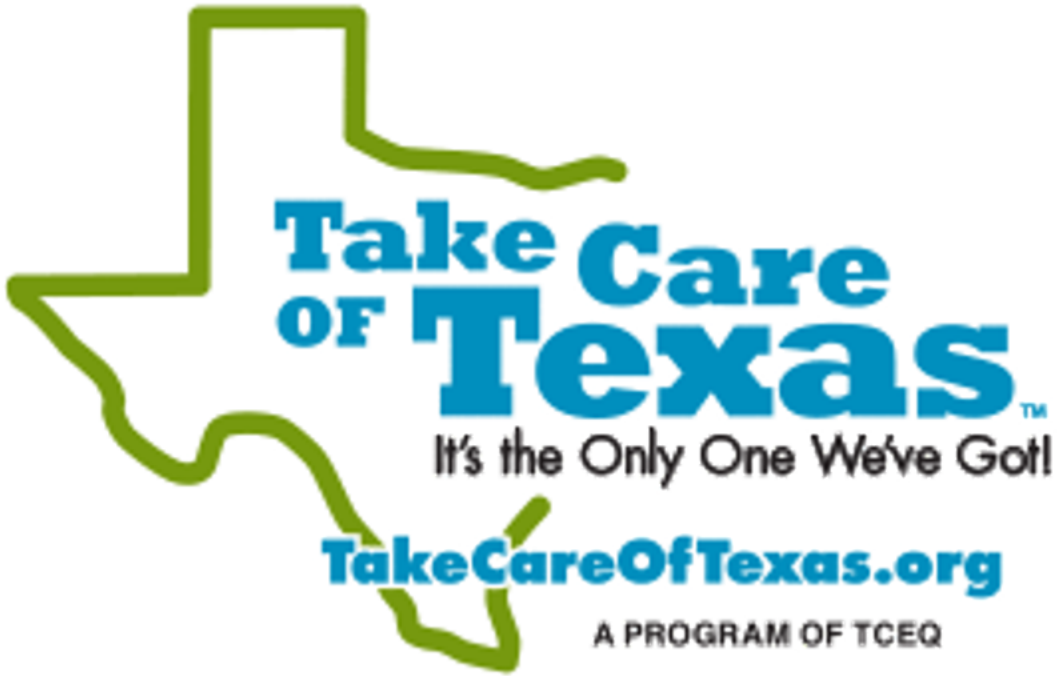
Eight-Hour Ozone Design Values in the Five Largest CBSAs



Questions?

Cynthia Gandee
Special Assistant, Coastal and East Texas Area
Texas Commission on Environmental Quality
Office of Compliance and Enforcement

cynthia.gandee@tceq.texas.gov
512.239.0179



Toxics Release Inventory

Shelley Fudge

Shelley Fudge

Environmental Justice & Tribal Affairs Coordinator

Toxics Release Inventory Program Division

Office of Chemical Safety and Pollution Prevention

U.S. Environmental Protection Agency

Toxics Release Inventory

U.S. Environmental Protection Agency

Improved, user-friendly access to data about industrial chemical releases in your community

Presentation Overview

- What is the Toxics Release Inventory (TRI)?
- Why is TRI important to EJ communities?
- Introducing new, user-friendly way to access TRI data
- Examples of how to use the new improved TRI search interface to find TRI data in your community
- How TRI can supplement states' environmental information resource systems

What is TRI?

- TRI is an EPA information resource that can help you learn about toxic chemical releases from certain facilities **in your neighborhood.**
- TRI can tell you about:

Releases

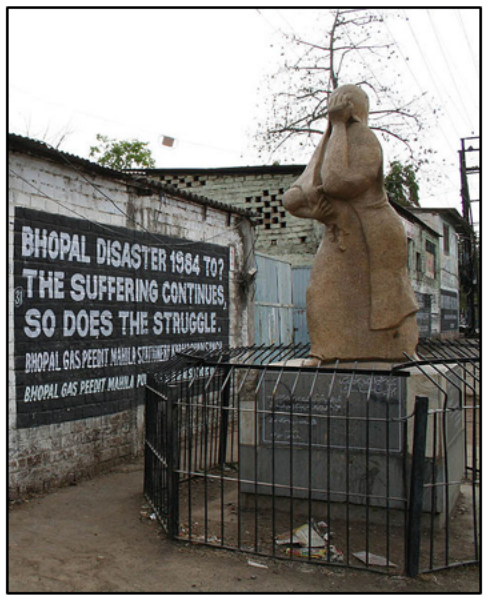
Waste transfers

Recycling

Pollution prevention

- TRI includes data from more than 21,000 facilities across the country, and covers 767 individual chemicals and 33 chemical categories.

Why was the Toxics Release Inventory created?



Bhopal memorial for those killed and disabled by the 1984 toxic gas release

Bhopal, India December 1984

- Methyl isocyanate gas was released at a Union Carbide chemical plant.
- Thousands died the first night, thousands more since and survivors continue to suffer with permanent disabilities.

Institute, West Virginia August 1985

- Chemicals released at a similar facility in the U.S.
- More than 100 people hospitalized.

- These events led to the passage of the Emergency Planning and Community Right-to-Know Act (EPCRA) by Congress in 1986, which mandated the enactment of EPA's TRI program.

Why is TRI important to Environmental Justice communities?

TRI can help EJ communities:

- Identify **how many TRI facilities** operate in the community **and where they are located**.
- Identify **which chemicals are being released** by TRI facilities.
- **Track increases or reductions** of toxic chemical releases from facilities located in the community over time.
- **Compare the toxic chemical releases and pollution prevention efforts of facilities** in one location with similar facilities across the country.
- **Prioritize efforts to reduce pollution** from facilities located in the community.

Which facilities must report to TRI?

1. Must be in a **TRI-covered industry sector or category**, including:

Manufacturing

Coal/Oil Electricity Generation

Certain Mining Facilities

Hazardous Waste Management

Federal Facilities

2. Must have the equivalent of at least **10 full-time employees.**

3. Must manufacture, process or use more than a **certain threshold amount of a TRI-listed toxic chemical per year.**

What information do facilities report to TRI?

- On-site releases of TRI chemicals to:
  - Air
  - Water
  - Land
- Transfer of chemical waste to off-site locations
- Waste management:
  - Recycling
  - Treatment
  - Energy Recovery
- Pollution prevention activities

What was the first year of TRI reporting?

- Facilities first reported TRI chemical release data to EPA for **calendar year 1987**.

How quickly does EPA make TRI data available to the public?

- **Facilities are required to submit TRI reports to EPA on July 1st each year** for the previous calendar year's data.
- EPA publishes a preliminary dataset of submitted TRI data in late July.
- After completion of a thorough data quality process, **the revised TRI dataset used for the National Analysis becomes available in late October** and can be accessed using TRI's new improved search interface and other TRI online tools.

What are the limitations of TRI data?

- **Annual data** – collected from TRI reporting facilities each year
- Covers many, but **not all chemical releases and not all industry sectors**
- **Small facilities are not included** (under 10 employees)
- **Does not cover all sources of pollution**, (e.g. cars and trucks)
- **Does not describe how long or how often chemicals were released**

For more information, see *"Factors to Consider When Using TRI Data"* at: www.epa.gov/toxics-release-inventory-tri-program/factors-consider-when-using-toxics-release-inventory-data

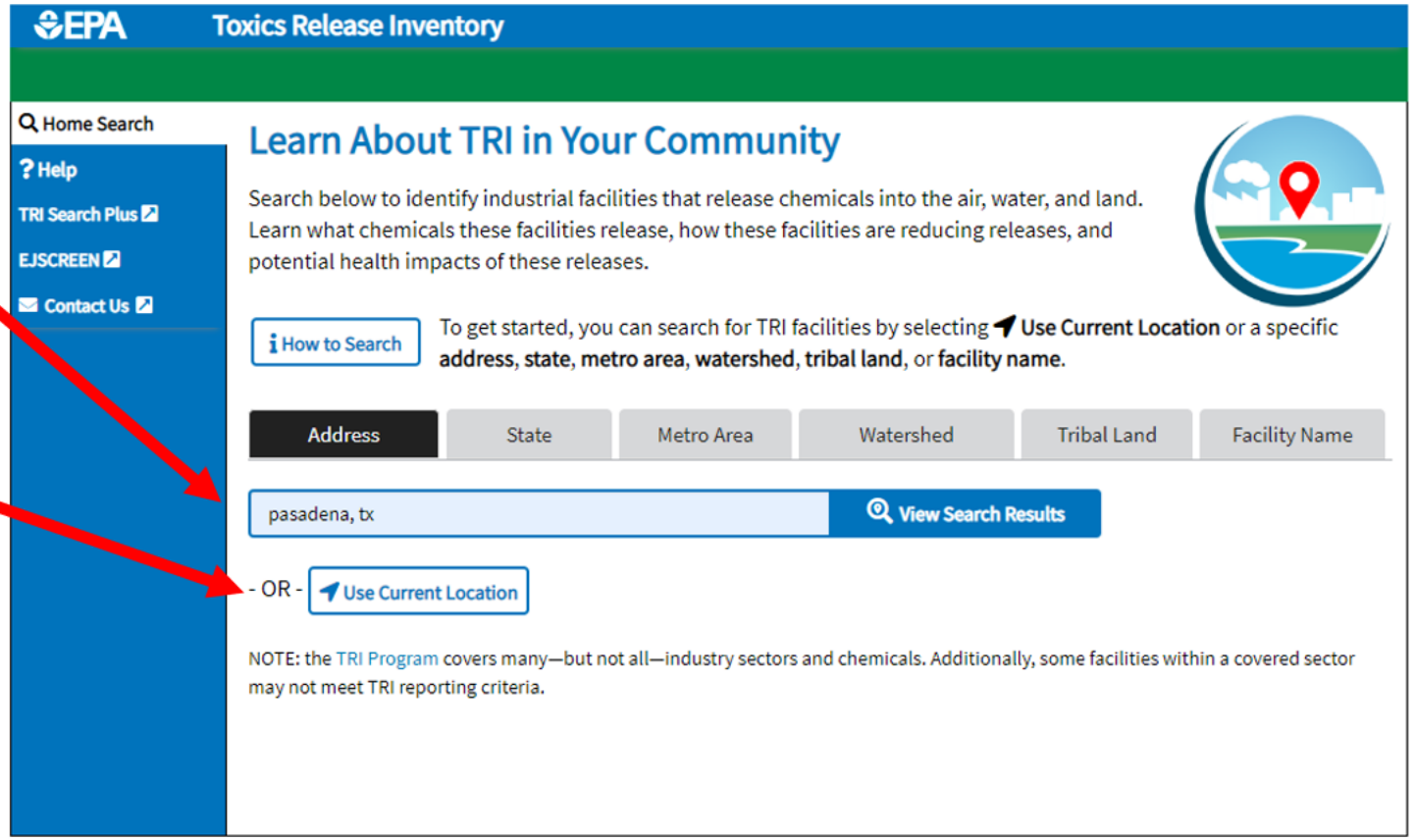
New improved TRI search interface
Examples of how to access and use it

- TRI's search interface is available at www.epa.gov/tri#trisearch
  - Now more user-friendly with expanded search options, interactive mapping features, charts, graphs and tables with summary community-level data and detailed data about individual TRI facilities, compliance and enforcement, potential health effects, and additional in-depth data in new TRI Search Plus section.
- Example 1: Pasadena, TX
  - Designated as a community for focus in the Texas Environmental Justice Collaborative Action Plan
- Example 2: 30th Street Corridor, Milwaukee, WI
  - Designated as an Environmental Justice Showcase Community in EPA Region 5

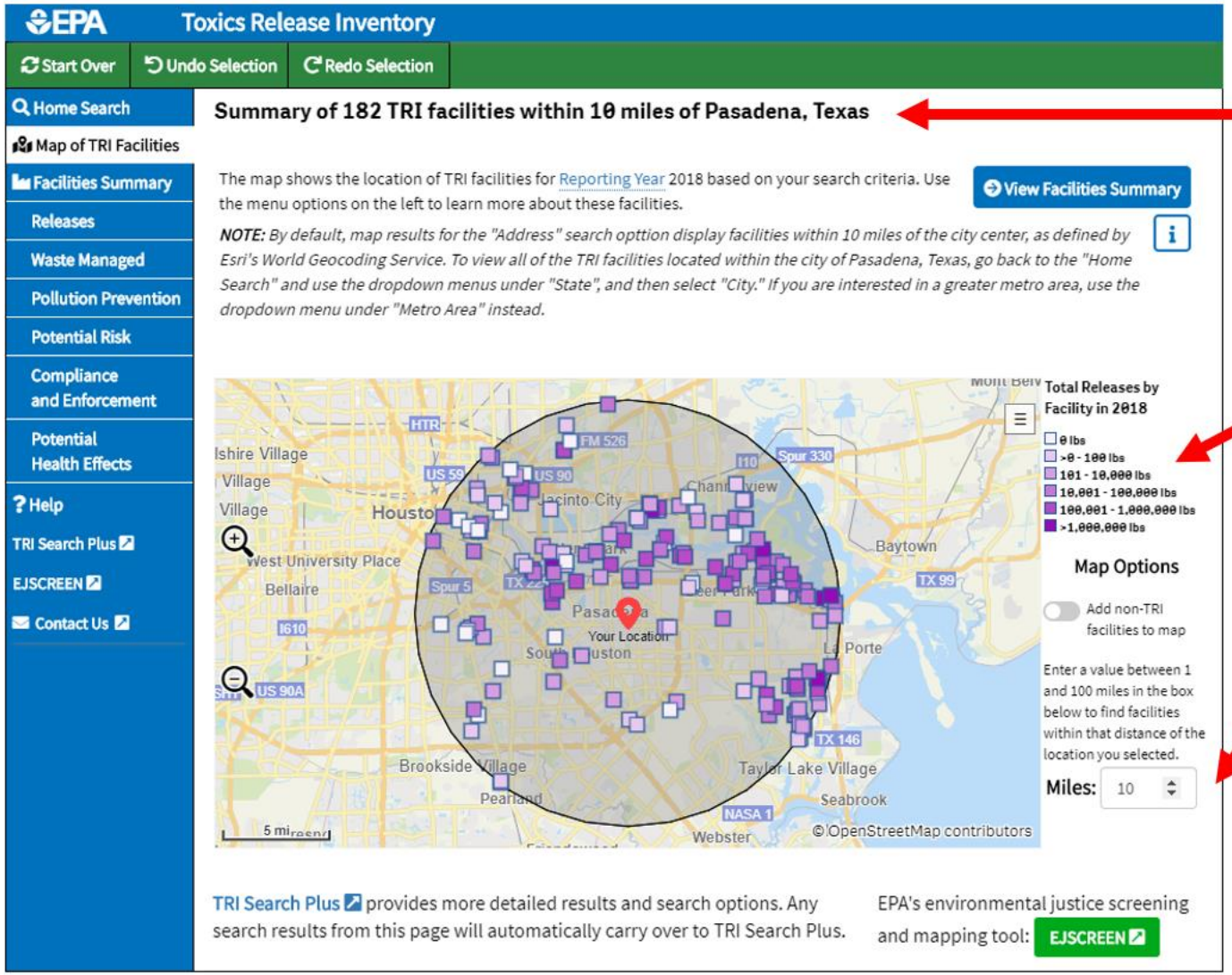
TRI Search Launch Screen
Example: Pasadena, TX

Enter an address or place name, then click "View Search Results" to see all TRI facilities in the most recent reporting year (currently 2018) within 10 miles.

Also "Current Location" search option (*unavailable for some devices/ browser settings)*



TRI Facilities Mapping
Example: Pasadena, TX



Displays the number of TRI facilities located within the selected **search radius.**

Facilities are shown as color-coded squares (in shades of deep purple to light purple/white) to identify the range of release quantities for each of the facilities in the selected search **radius.**

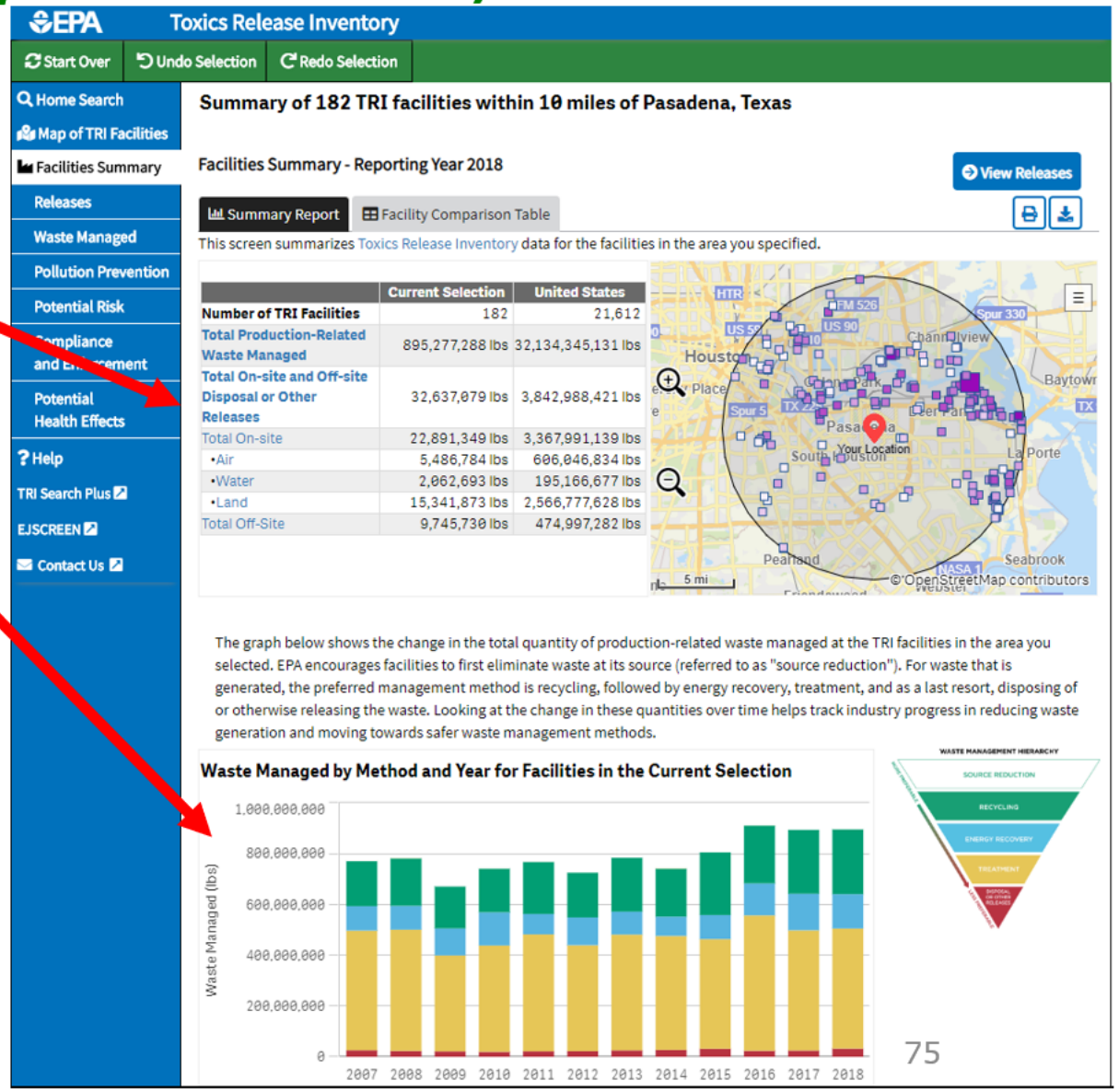
Can select a search radius between 1 to 100 miles. *(The default radius is 10 miles.)*

TRI Summary Report

Example: Pasadena, TX

Basic “Quick Facts” summary of overall TRI 2018 data about all TRI reporting facilities located within 10 miles of Pasadena, TX.

Includes a trends chart that provides a quick overview of waste managed and release quantities between 2007 and 2018.



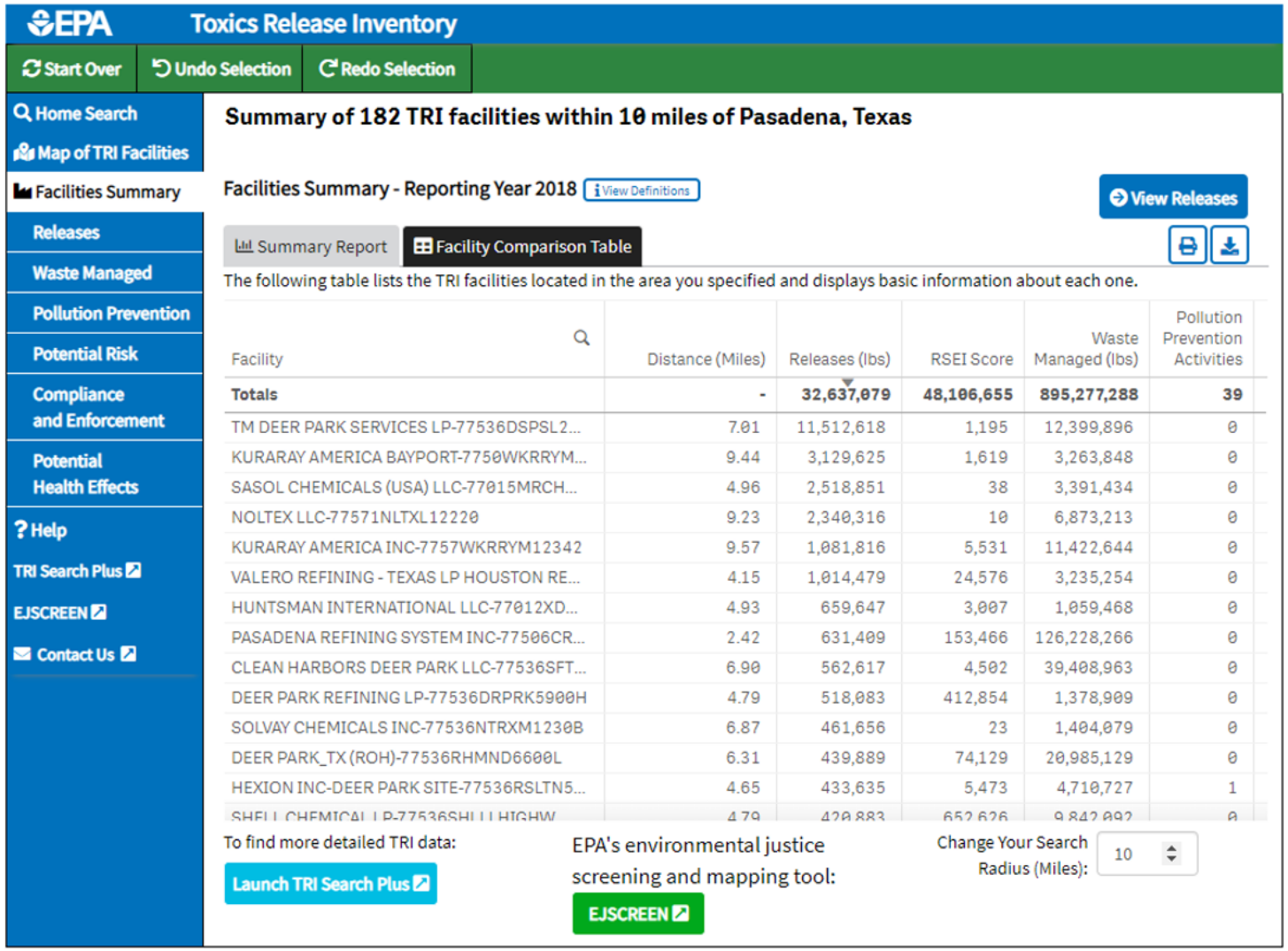
TRI Facilities Comparison Table

Example: Pasadena, TX

Side-by-side comparison of all 182 facilities.

Sort by:

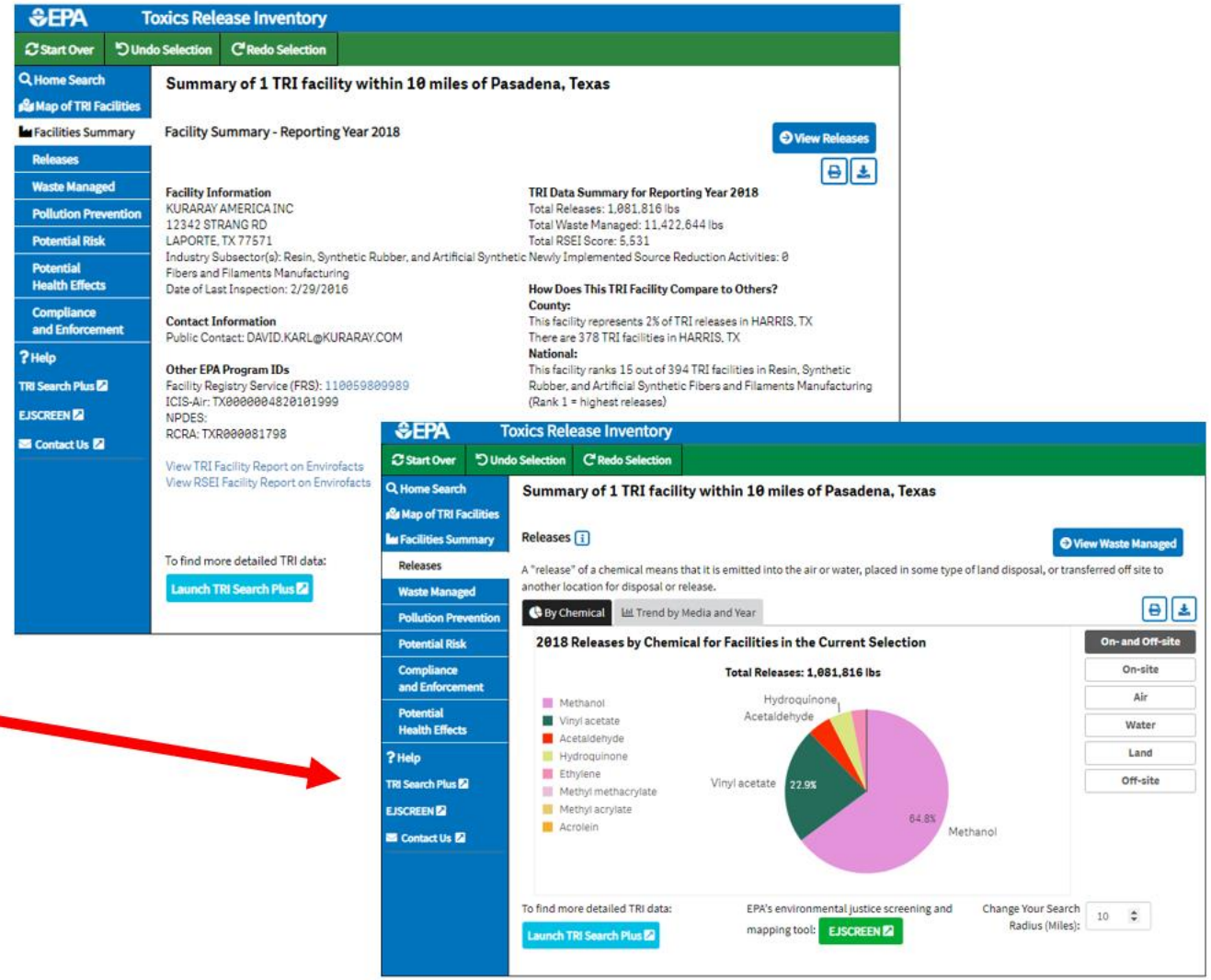
- Distance (from selected location)
- Releases
- RSEI Score
- Waste Managed
- Pollution Prevention Activities



TRI Data about Individual Facilities

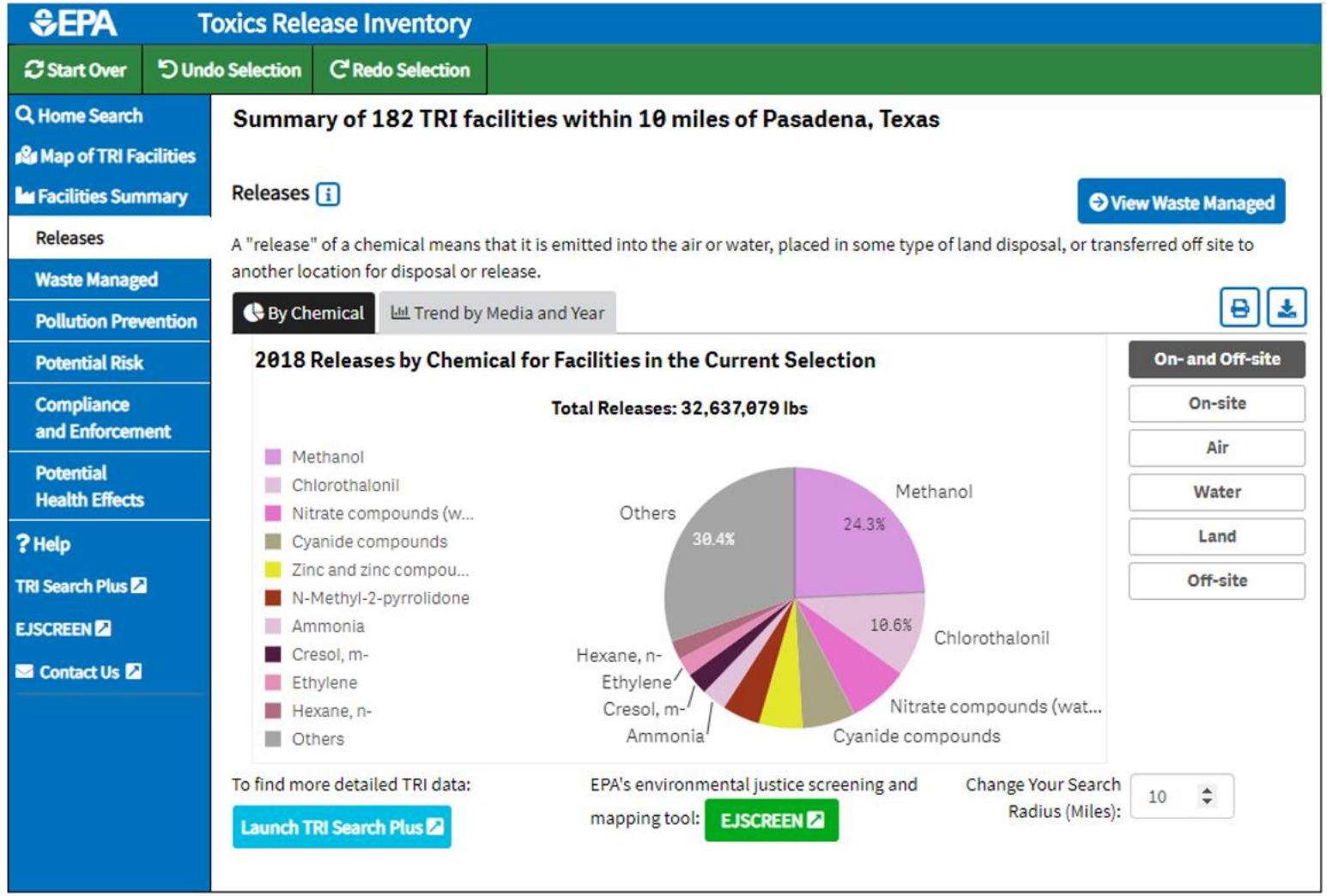
Example: Pasadena, TX

- Data about a single TRI facility can be accessed from the TRI search launch screen.
- This chart provides various data about the selected facility, including:
  - Data about total releases and waste management.
  - How the facility compares to others in the county and nationally.
  - How to access more detailed data about the facility.
- Various types of pie charts, trends graphs, tables, etc. are available to help you learn about individual facilities.



TRI Total Releases by Chemical
Example: Pasadena, TX

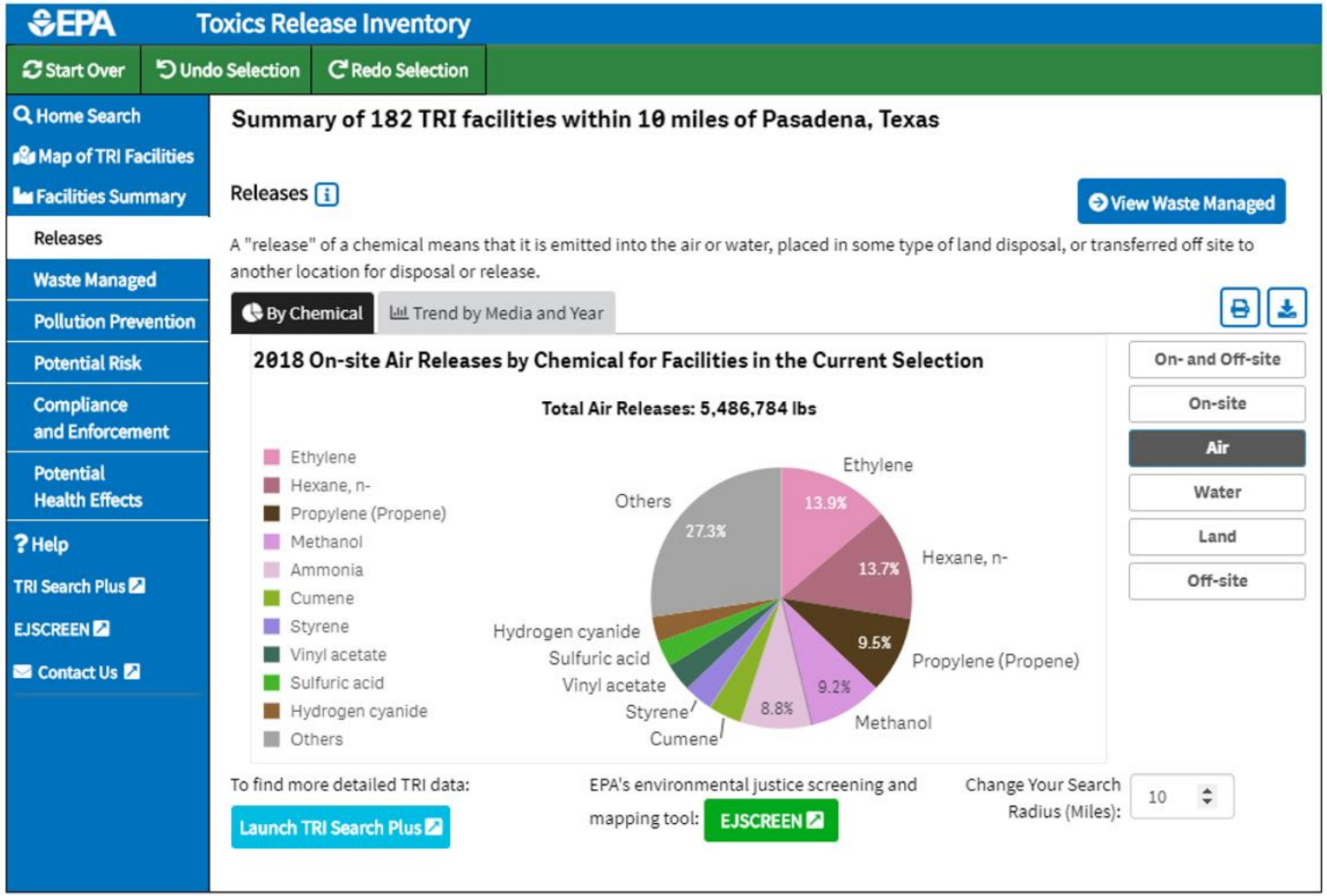
- Top chemicals by total release quantities (i.e., releases to air, water, land, and off-site releases) in 2018.



TRI Air Releases by Chemical

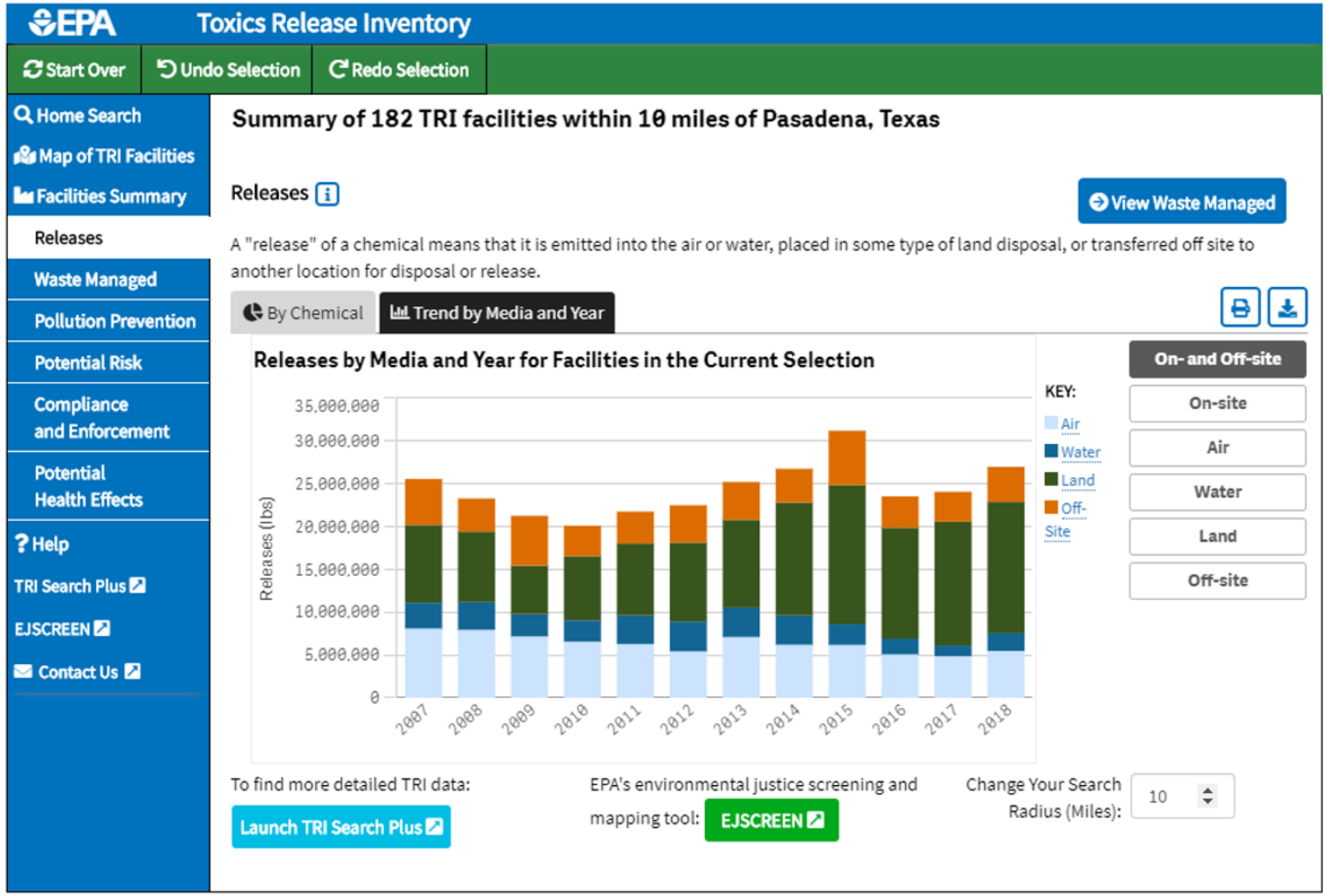
Example: Pasadena, TX

- In addition to data about total overall releases (see previous slide), one can choose to view data about releases by media (i.e., air, water, land), as well as by total on- or off-site releases.
- This chart displays data about the top chemicals released to the air by all the facilities located in the selected location.



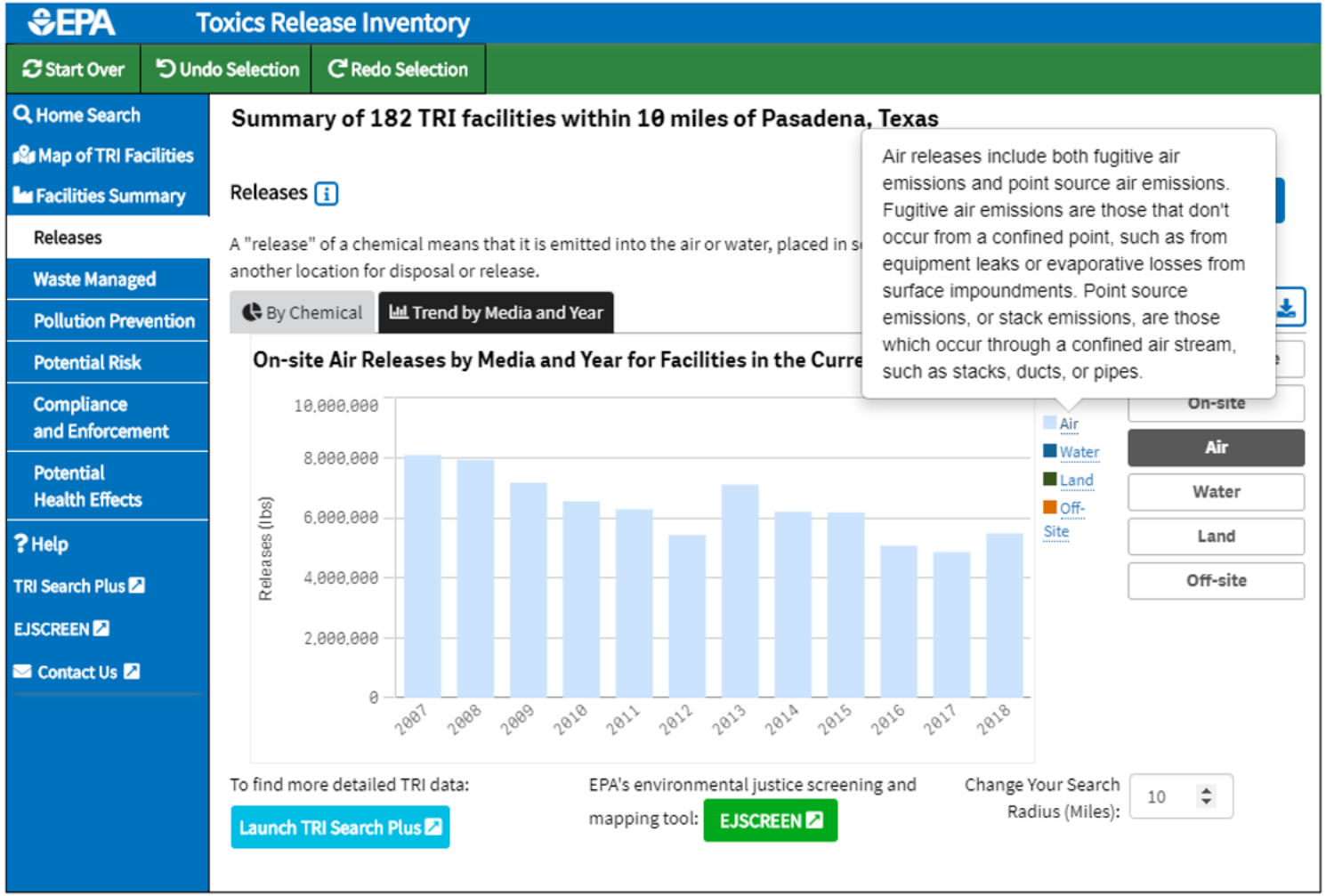
TRI Trends Data
Total Releases by Media and Year
Example: Pasadena, TX

- Trends chart showing total releases by all the facilities located in the selected location between 2007 to 2018 by media (i.e. air, water, land) as well as off-site releases.



TRI Trends Data
Air Releases by Media and Year
Example: Pasadena, TX

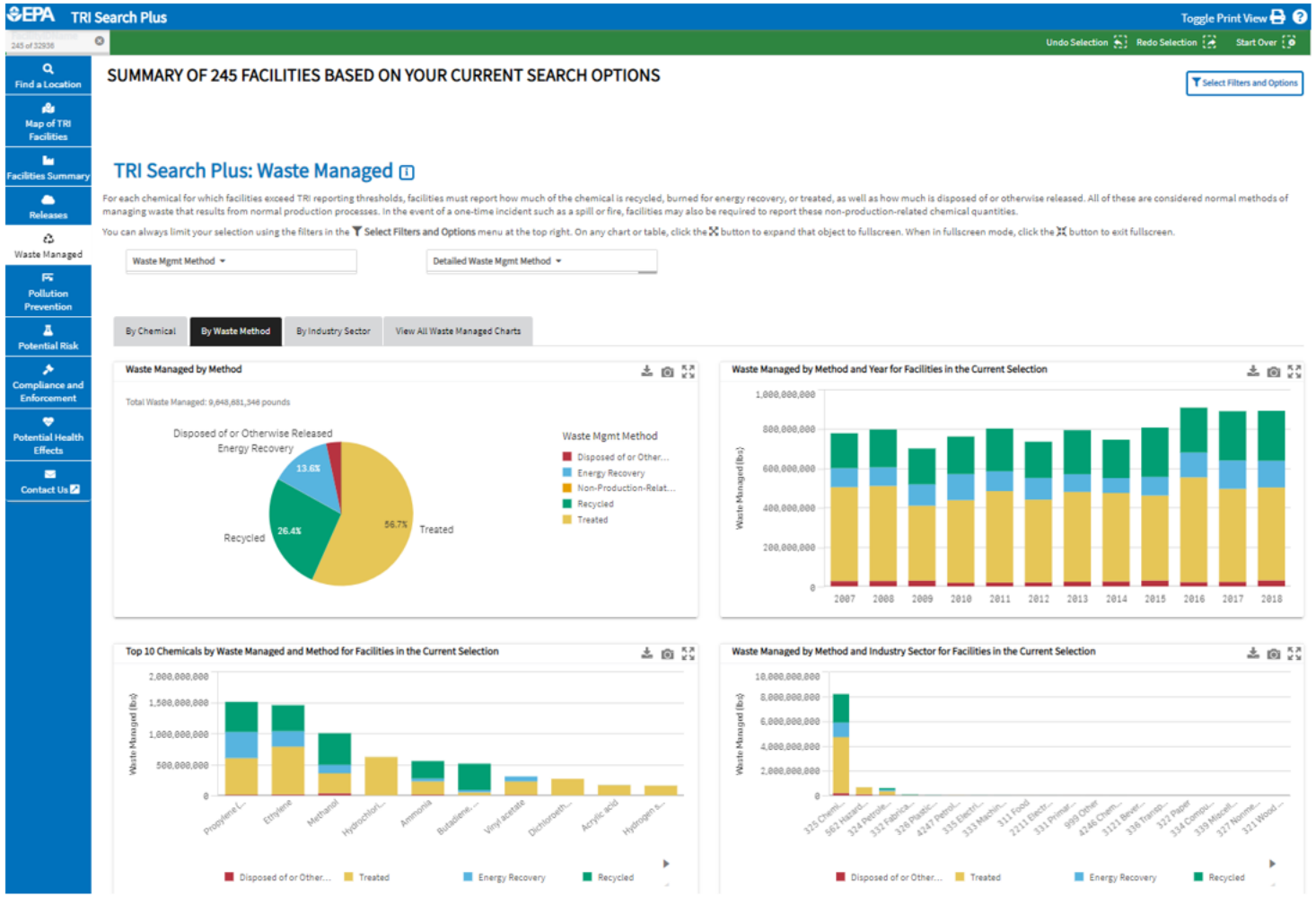
- Trend from 2007 to 2018 for air releases (shows slight decreasing trend over time).
- Tool tips are available that provide definitions of terms used and additional background information – to promote understanding of what each data element includes.



TRI Search Plus and TRI Waste Management Data

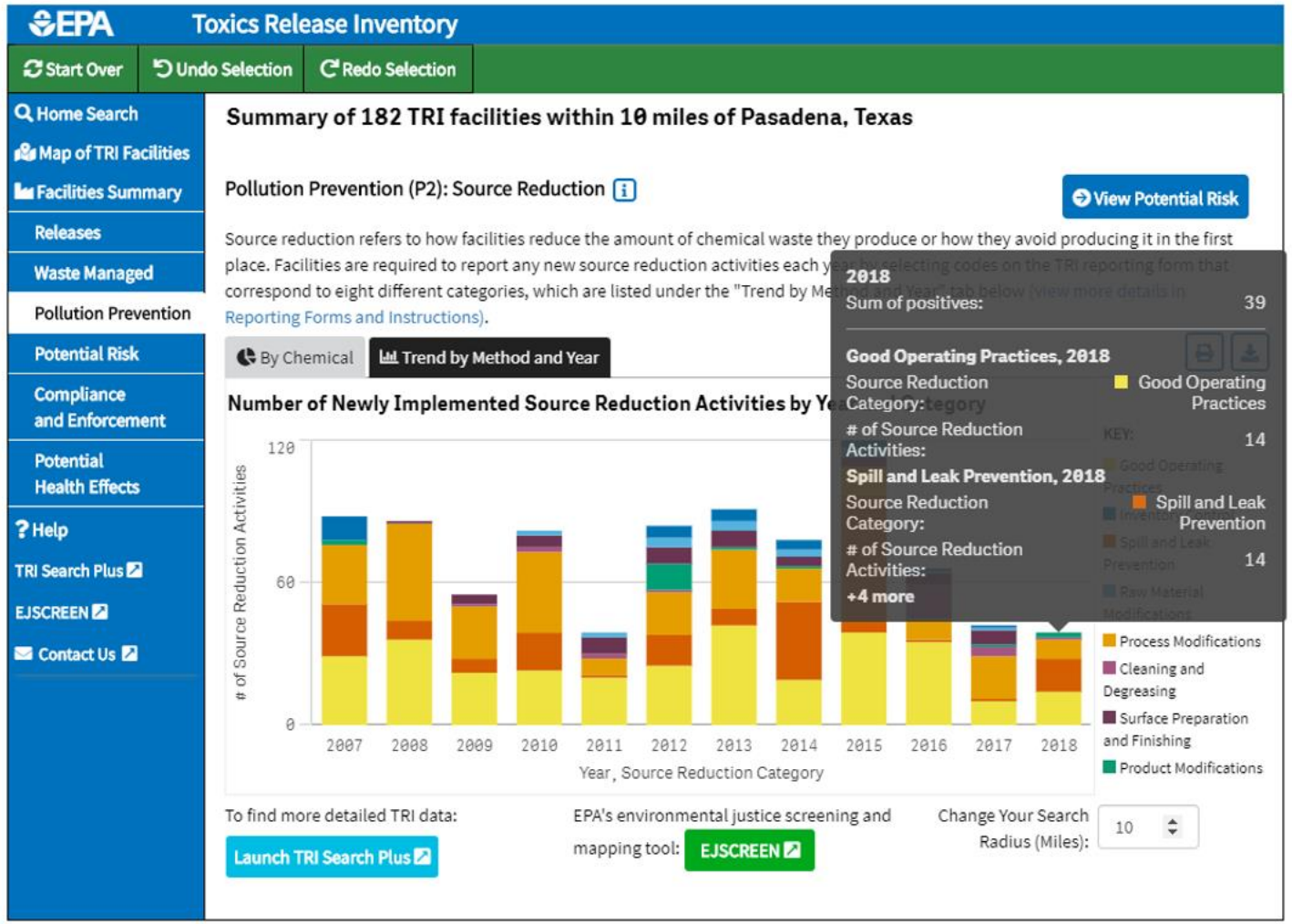
Example: Pasadena, TX

- TRI's search interface also offers a feature called TRI Search Plus that provides access to more in-depth TRI data with expanded charts, graphs and filter options, including:
  - Data about multiple years *(currently 2007 – 2018).*
  - Additional charts and tables for viewing data by chemical, media, year, industry sector, etc. -- In this example, total quantities of waste managed (i.e., recycling, energy recovery, treatment and disposal) for 2007 – 2018.



TRI Pollution Prevention (P2) Data
Example: Pasadena, TX

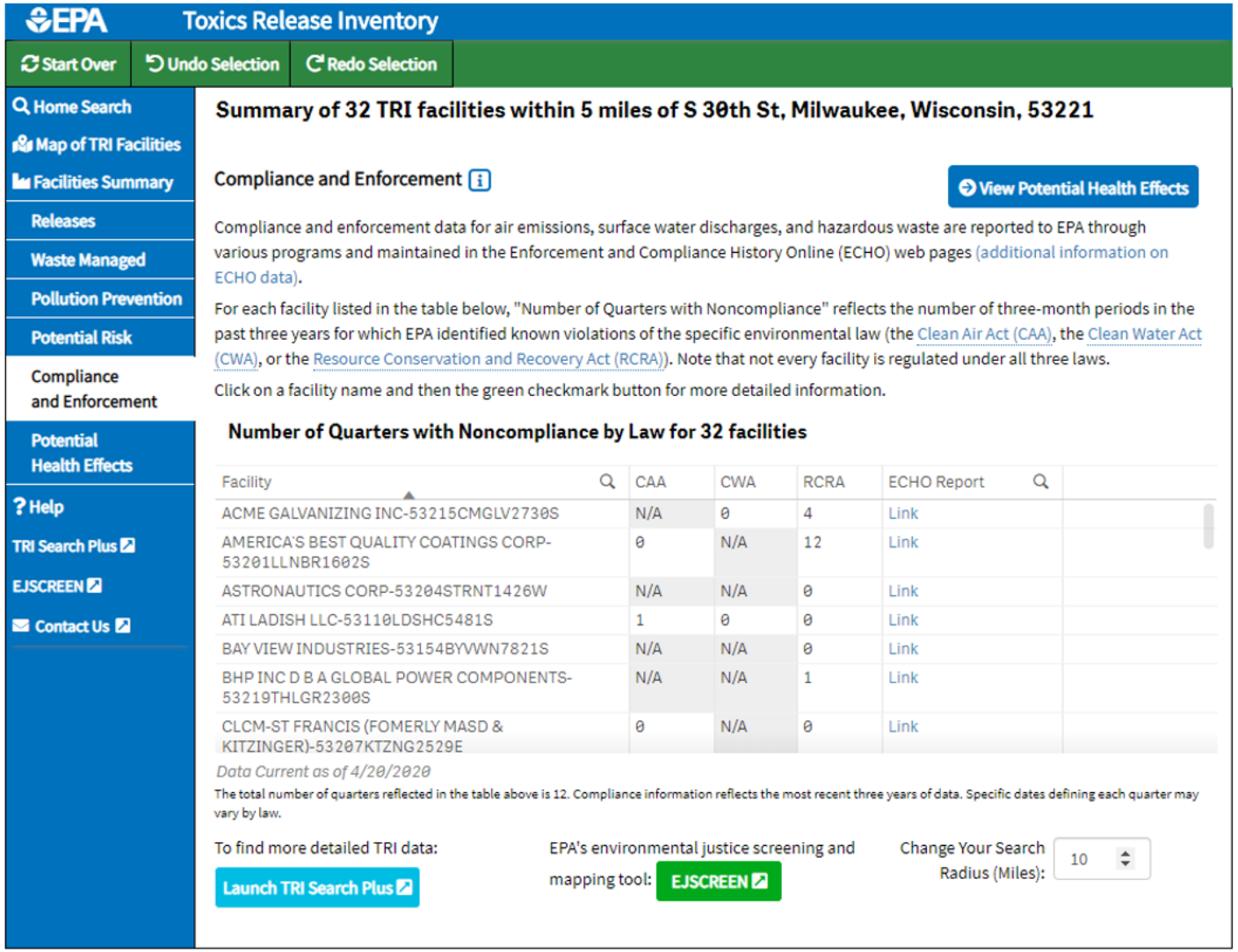
- Displays various P2 (source reduction) activities implemented by all facilities within 10 miles of Pasadena, TX.
- The majority of P2 activities implemented by all the facilities in Pasadena, TX during the most recent TRI reporting year (2018) were spill and leak prevention, and good operating practices.



Compliance and Enforcement

Example: 30th Street Corridor, Milwaukee, WI

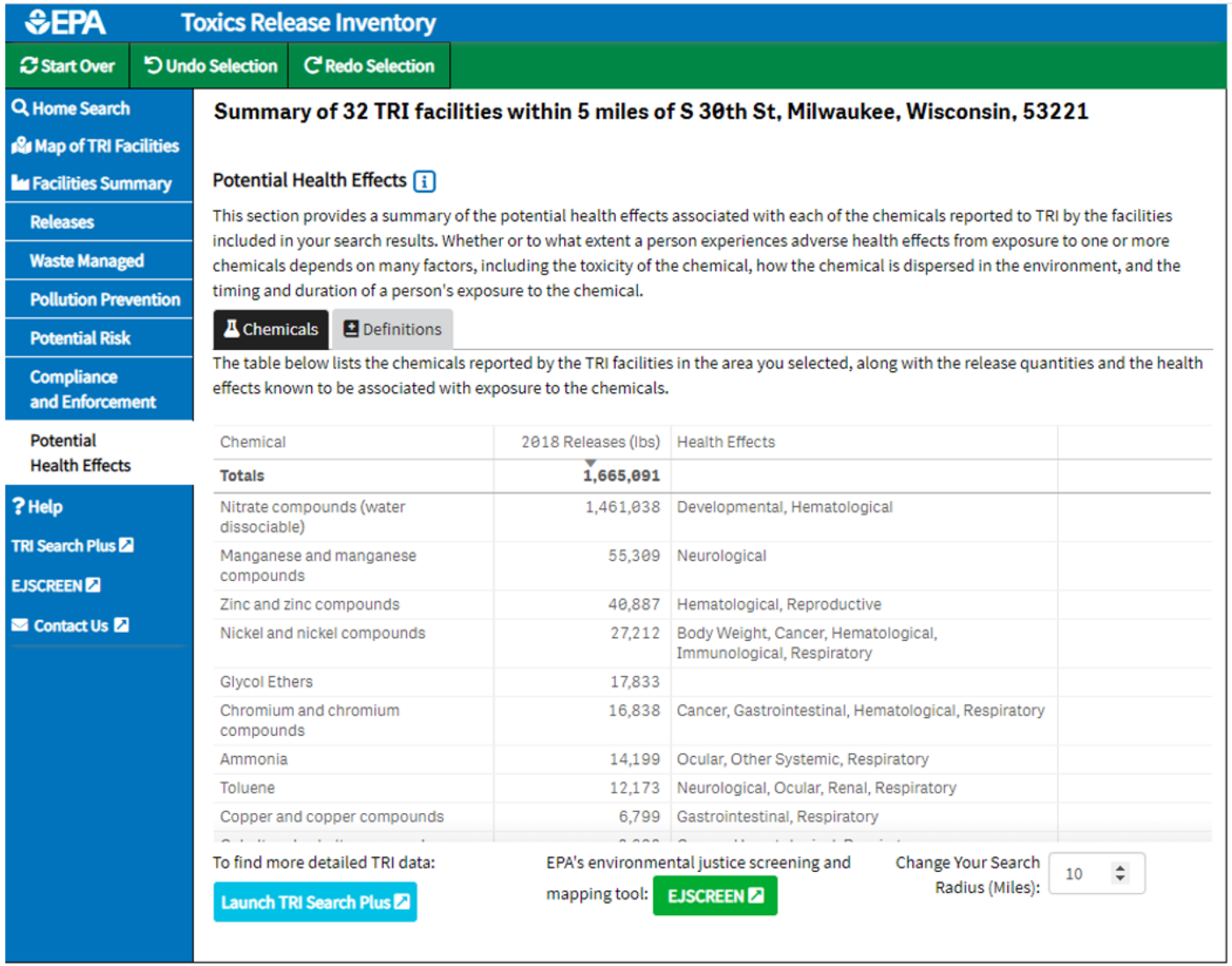
- EPA compliance and enforcement data about facilities within 5 miles of S 30th Street, Milwaukee, WI under the Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act.



Potential Health Effects

Example: 30th Street Corridor, Milwaukee, WI

- Potential health effects associated with each chemical released from the facilities within 5 miles of S 30th Street, Milwaukee, WI.



Comparison: TRI vs TCEQ STEERS

TRI includes annually reported data by facilities throughout the U.S. that meet TRI reporting requirements. This example displays annual TRI data about air releases by a single facility (Kuraray America Inc. in Pasadena, TX), and highlights the total releases and percentage share of total releases for each of the top chemicals released in 2018.

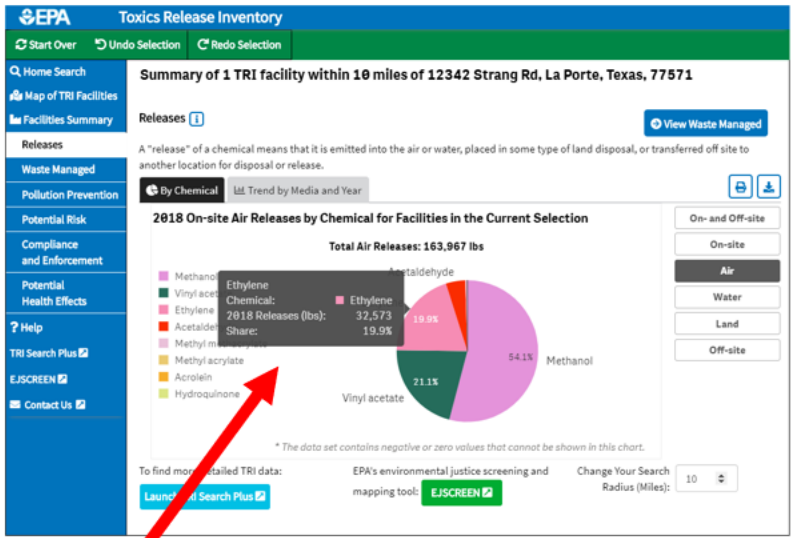
State of Texas Environmental Electronics Reporting System (STEERS) includes reports about certain individual air emissions events that exceed a reportable quantity from facilities that are regulated by the Texas Commission on Environmental Quality.

Both TRI and STEERS display data about pounds of chemicals released by individual facilities.

STEERS data is available through the present day; TRI currently includes data though 2018 *(TRI's data for 2019 will become available in late 2020*).

The example screenshot displayed here is for Kuraray America Inc. in Pasadena, TX in 2018:

- TRI annual, aggregated data shows 32,573 lbs of ethylene were released by Kuraray America in 2018.
- STEERS data shows 150 lbs of ethylene were released by Kuraray America during a 2 ½ hour event on January 2, 2018.



TCEQ STEERS

Air Emission Event Report Database Incident 275496

Export emission point and contaminant information to Excel spreadsheet.

Incident Tracking Number:	275496	Incident Status:	CLOSED
Report Type:	FINAL	Report Date:	01/15/2018
Name of Owner or Operator:	KURARAY AMERICA INC	CN:	CN603315953
Regulated Entity Name:	KURARAY LA PORTE	RN:	RN107305922
Physical Location:	12342 STRANG RD; LA PORTE, TX 77571		
County:	HARRIS		
Event/Activity Type:	EMISSIONS EVENT		
Date and Time Event Discovered or Scheduled Activity Start:	01/02/2018 02:20 AM		
Date and Time Event or Scheduled Activity Ended:	01/02/2018 04:45 AM		
Event Duration:	2 hours, 25 minutes		

Process Unit or Area Common Names
Reaction Gas Loop (VS-223P)

Facility Common Name	Facility Identification Number (FIN)
'A' Plant Flare MSS Emissions	VS-202(MSS)
Fugitives (@Vaporizer Pressure Transmitter Drain)	VS-400F

1 - Emission Point Common Name:	Emission Point Number:
'A' Plant Flare MSS Emissions	VS-202(MSS)

List of Air Contaminant Compounds - 6 total

Description	Est. Quantity / Opacity	Units	Emission Limit	Units	Authorization
Acetaldehyde	3.23	POUNDS	168.64	LBS/HR	NSR 4445 for VS-202(MSS) total VOC
Carbon Monoxide	0.3305	POUNDS	171.24	LBS/HR	NSR 4445 for VS-202(MSS) CO
Ethylene (gaseous)	150.24	POUNDS	168.64	LBS/HR	NSR 4445 for VS-202(MSS) total VOC
Nitrogen Oxides	0.0649	POUNDS	23.71	LBS/HR	NSR 4445 for VS-202(MSS) NOx
Sulfur dioxide	0.01	POUNDS	0.05	LBS/HR	NSR 4445 for VS-202(MSS) SO2
Vinyl acetate	7.34	POUNDS	168.64	LBS/HR	NSR 4445 for VS-202(MSS) total VOC

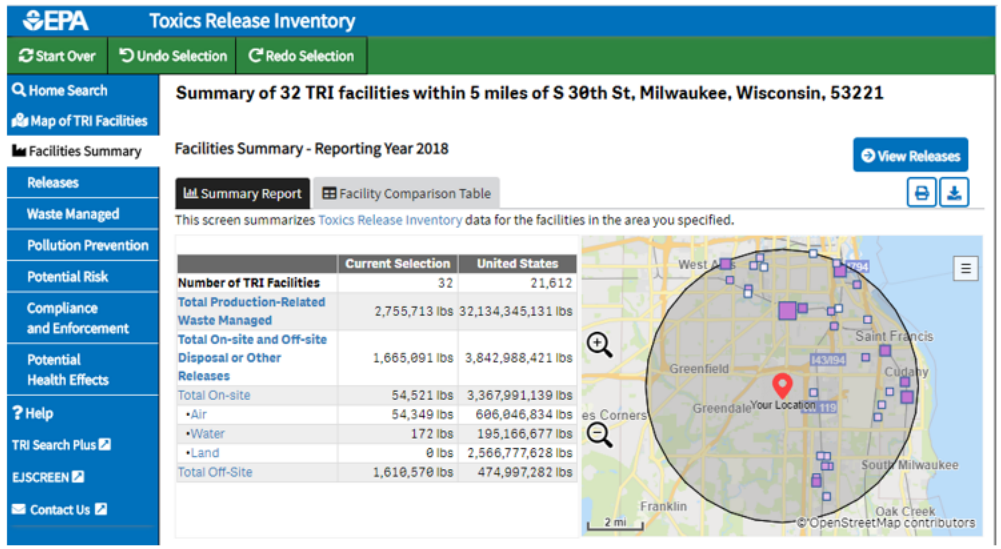
Comparison: TRI vs Wisconsin Tracking Program Public Data Portal

Wisconsin Tracking Program Public Data Portal includes a variety of data related to public health issues, such as data about childhood lead exposure, drinking water contaminants, cancer rates, and reproductive outcomes.

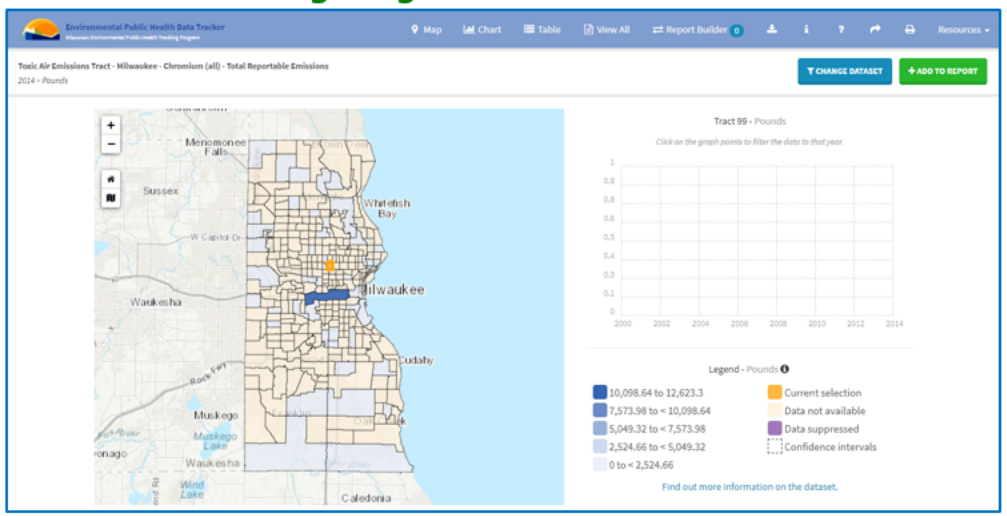
One of the topics included in the WI Tracking Data Portal is toxic air emissions data, reported by facilities located in Wisconsin. Data on over 30 chemicals are available at the census tract level.

TRI includes data regarding chemical releases to air, water, and land about 800 chemicals and chemical categories. The most recent data is for 2018. *(2019 data will become available in late 2020.)*

Although the toxic air emissions data in the WI Tracking Data Portal and TRI data both cover toxic air releases from industrial facilities (e.g., number of facilities and pounds of chemicals released), they are not directly comparable, due to differences such as chemical reporting thresholds.

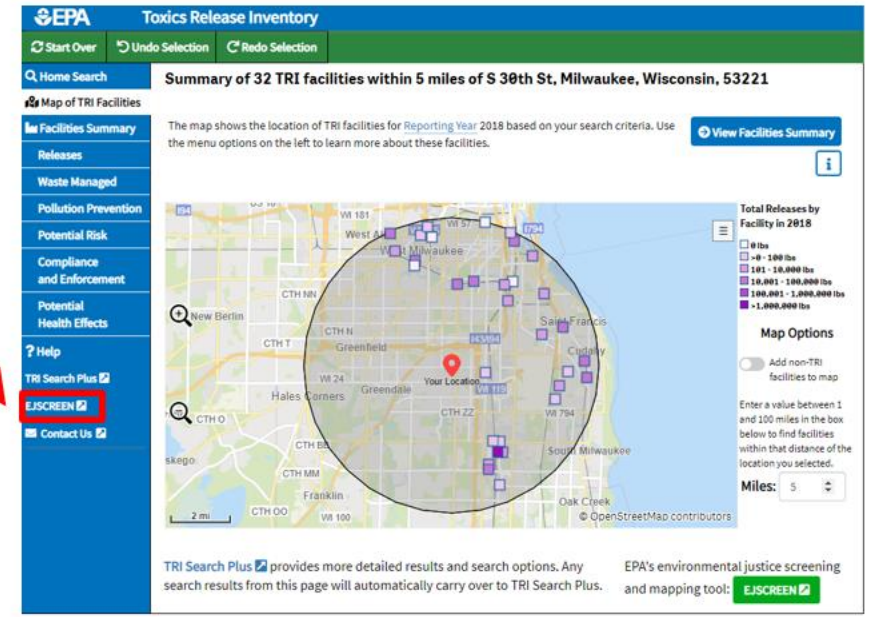


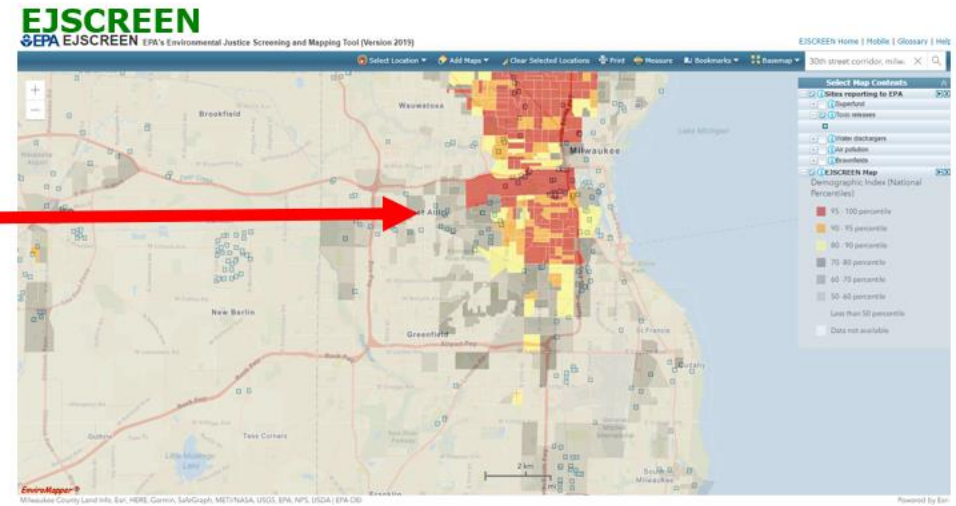
Wisconsin Tracking Program Public Data Portal



TRI vs EJSCREEN

- The new TRI search interface features EJSCREEN throughout all its webpages on its menu bar.
- EJSCREEN includes demographic and environmental indicator information available at the Census block group level *(currently unavailable for TRI)*, as well as search capability to locate various sites reporting to EPA and other points of interest such as schools, parks, and public housing.
- EJSCREEN provides the ability to view the location of TRI facilities and overlay that data with EJSCREEN's demographic, environmental indicator, and/or other location layers.
  - EJSCREEN demographic index: average of percent low-income and percent minority populations in each Census block group (these are the two demographic factors named in EO 12898 on Environmental Justice).
  - Orange and red shading indicates higher value of demographic index compared to national percentiles (i.e., larger minority and/or low-income populations as a percentage of the total population in each block group).
  - Blue squares indicate TRI facilities.





TRI Resources and Contact Information for EJ Communities

To learn more about TRI check out the new improved TRI search interface: www.epa.gov/tri/#trisearch

TRI Information Center: (800) 424-9346
(Select option #3 from menu – 10 am - 5:00 pm ET)

To email a question to a TRI program expert: tri.help@epa.gov

TRI Contacts: www.epa.gov/tri/contacts

TRI Regional Coordinators: www.epa.gov/tri/regionalcoordinators

Discussion

- Summary
- Questions and Answers
- For more information, tools and resources, go to EPA Environmental Justice Learning Center

https://www.epa.gov/environmentaljustice/environmental-justice-learning-center