“Am I proud of my environmental record as governor? You bet I am, and I look forward to running on it.”

—Governor George W. Bush, answering media questions about campaign money he took from big air polluters.

ENVIRONMENT

A hub of the energy and chemical industries, Texas is No. 1 in: toxic emissions; hazardous waste and spills; animal manure and environmental civil rights complaints. No other state consumes as much energy or emits as much global-warming carbon dioxide.

Texas air pollution is billowing into a crisis. More than one-half of Texas' population lives in urban areas that flunk federal air standards. Houston recently supplanted Los Angeles as the nation's smog capital in 1999, though L.A. is positioned to reclaim the title in 2000.

During Governor George W. Bush's tenure, the Texas Legislature and the Bush administration often have exacerbated these air problems. In 1995, they pulled the plug on auto smog inspections for the state's two biggest metropolitan areas. This hurt the environment twice. When Texas had to pay $130 million to settle breach-of-contract claims filed by the company that it had hired to perform the tailpipe inspections, it got the money by raiding state environmental protection funds.

Exxon and Marathon quietly drafted Bush's signature environmental policy. The Clean Air Responsibility Enterprise (CARE) program seeks to address a loophole in the state's 1971 Clean Air Act, which "grandfathered" existing industrial plants from the need to install modern pollution controls. CARE invites grandfathered air polluters to voluntarily reduce emissions. Joining CARE is easy: polluters need not say how much pollution they will eliminate—or by when.

Bush set the stage for his environmental legacy with his three 1995 appointments to head the Texas Natural Resource Conservation Commission (TNRCC). These three appointees were: an agribusinessman; a former Monsanto executive; and an oil lawyer who, as Texas' deputy commissioner of agriculture, deprived farm workers of the right to advance warnings of aerial pesticide sprayings.

Bush environmental hallmarks include:

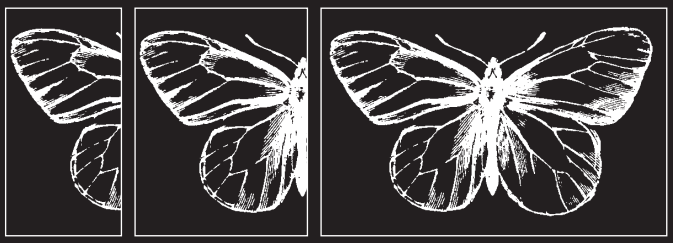
- Lax Enforcement: Bush signed an "audit privilege" law giving polluters sweeping immunity for self-reported environmental violations. His TNRCC eliminated environmental rules not required by Congress and banned inspectors from unannounced plant visits. In 1995, they barred their inspectors from issuing pollution citations in the field to animal feed lots.
- Lowered standards: When paper-mill effluent recently endangered a reservoir's water-quality standards, the TNRCC simply lowered standards. When three new areas recently flunked federal ozone standards, Bush and the TNRCC urged the EPA to pretend that there were insufficient data to grade those air sheds.
- Silenced critics: The TNRCC severely limited citizens' rights to contest industry requests for pollution permits. State police also arrested environmentalists in 1999 for peaceful picketing in front of the Governor's Mansion.

Polluters are energized by Bush's candidacy. In April 2000 they met with top officials from states that are flunking federal air standards to explore ways that these standards could be relaxed under a Bush presidency.

ENVIRONMENT INDICATORS

ENVIRONMENT

INDICATORS



1 MANUFACTURING USE OF TOXIC CHEMICALS

The federal Environmental Protection Agency established the Toxic Release Inventory (TRI) to track industry's use and disposal of some of the country's most dangerous chemicals. A major hub of the global oil and chemical industries, Texas ranks No. 1 in the total amount of TRI chemicals used by its manufacturing industries. This state accounts for 17 percent of the 24 billion pounds of TRI chemicals that the nation uses annually. Texas manufacturing plants use 203 pounds of TRI chemicals per Texan per year. On a per capita basis, Texas ranks No. 4 in total TRI chemical usage.

Rank	State	Use of All TRI Chemicals (Lbs./Year)
1	**Texas**	**3,998,272,653**
2	Louisiana	2,320,998,681
3	Illinois	1,801,799,499
4	Pennsylvania	964,420,256
5	Florida	941,575,807
46	South Dakota	9,037,940
47	North Dakota	8,461,929
48	Hawaii	4,117,898
49	Alaska	3,999,198
50	Vermont	3,951,663

Source: U.S. Environmental Protection Agency, 1998 Toxic Release Inventory data.
Website: www.epa.gov/tri/tri98/data/rlme98atold2.pdf

2 TOXIC & CANCEROUS MANUFACTURING EMISSIONS

In addition to leading the nation in the *use* of Toxic Release Inventory (TRI) chemicals tracked by the Environmental Protection Agency, Texas manufacturing plants lead the nation in the *emissions* of these dangerous chemicals into the air, land and water. Texas falls to No. 14 in per capita emissions of these chemicals. Some 79 percent of the U.S. population lives in states that emit less of these TRI chemicals on a per capita basis.

Rank	State	All TRI On/Off-Site Chemical Emissions (Lbs./Year)
1	**Texas**	**259,158,224**
2	Louisiana	175,294,432
3	Ohio	144,342,654
4	Pennsylvania	136,008,169
5	Indiana	114,893,229
46	North Dakota	2,449,480
47	Alaska	1,937,759
48	Rhode Island	1,732,874
49	Hawaii	418,924
50	Vermont	412,965

Among the most dangerous TRI chemicals are those that scientists have linked to cancers in animals or humans. Texas is the No. 1 dumper of these carcinogens, accounting for 11 percent of the 236 million pounds of them that U.S. manufacturing plants dumped into the environment in 1998.

Rank	State	TRI Carcinogen Emissions (Lbs./Year)
1	**Texas**	**26,487,255**
2	Louisiana	20,345,397
3	Pennsylvania	15,236,113
4	Ohio	14,214,159
5	Indiana	14,148,122
46	South Dakota	202,078
47	Wyoming	62,192
48	Vermont	36,615
49	Alaska	30,882
50	Hawaii	14,364

Source: U.S. Environmental Protection Agency, 1998 Toxic Release Inventory data.
Website: www.epa.gov/tri/tri98/data/rlme98atold2.pdf

3 TOTAL HAZARDOUS WASTE

Texas is No. 1 in hazardous waste production. It accounts for 46 percent of the 41 million tons of hazardous waste that the United States generates annually. Hazardous waste includes chemicals that are poisonous, flammable, corrosive or that react dangerously when combined with other chemicals.

Rank	State	Tons / Year
1	**Texas**	**18,973,406**
2	Louisiana	4,624,829
3	Illinois	2,201,025
4	Ohio	1,693,247
5	Mississippi	1,654,338
46	Alaska	4,547
47	Vermont	4,064
48	North Dakota	2,686
49	Wyoming	1,478
50	South Dakota	948

Source: U.S. Environmental Protection Agency, Solid Waste and Emergency Response, "National Biennial RCRA Hazardous Waste Report Executive Summary," EPA530-S-99-036, September 1999, p. ES-6.

Website: www.epa.gov/epaoswer/hazwaste/data/br97/index.htm

4 HAZARDOUS WASTE INCINERATION

Of the 239 hazardous waste incineration facilities in the United States, 24 percent are in Texas. Texas manufacturing plants also lead the nation in the 917 million pounds of Toxic Release Inventory (TRI) chemicals that they "recycle" annually as "energy recovery" (28 percent of the nation's total TRI waste is disposed of this way). While incinerating hazardous waste produces power for energy-hungry industrial plants such as cement kilns, it does not magically eliminate hazardous wastes. Instead, it converts many hazardous wastes into toxic air emissions.

Rank	State	No. of Incineration Facilities
1	**Texas**	**56**
2	Louisiana	27
3	Ohio	13
4	New York	10
5	Indiana	9
29-38	Colorado (tied)	1
29-38	Connecticut (tied)	1
29-38	Delaware (tied)	1
29-38	Hawaii (tied)	1
29-38	Idaho (tied)	1
29-38	Massachusetts (tied)	1
29-38	Nebraska (tied)	1
29-38	Nevada (tied)	1
29-38	New Mexico (tied)	1
29-38	Utah (tied)	1

Note: A dozen states have no hazardous waste incineration facilities.

Source: U.S. Environmental Protection Agency, Office of Solid Waste, Permits and State Programs, incinerator census as of May 2000.

5 HAZARDOUS CHEMICAL SPILLS

The federal Environmental Protection Agency tracks spills of hazardous chemicals and oil through its Emergency Response Notification System. Since 1995, Texas ranked second only to Louisiana in the number of these spills. During each year of this period, Texas ranked either No. 1 or No. 2 in the total amount of material spilled. In 1999, there was an estimated 10 million pounds of oil and hazardous substances spilled in Texas.

Rank	State	No. of Spills Since 1995
1	Louisiana	3,901
2	**Texas**	**3,207**
3	California	2,025
4	Florida	1,001
5	Virginia	835
46	Idaho	55
47	Vermont	44
48	Rhode Island	26
49	North Dakota	25
50	South Dakota	22

Source: Source: U.S. Environmental Protection Agency, Emergency Response Notification System (ERNS) database.

Website: www.epa.gov/ERNS/docs/toc.htm

6 ENVIRONMENTAL CIVIL RIGHTS COMPLAINTS

Texas leads the nation in "Title VI" environmental civil rights complaints filed with the federal Environmental Protection Agency. Of 87 such complaints nationwide, 14 percent are from Texas. Alleging environmental racism, these complaints seek to reverse a pattern in which minority neighborhoods absorb a grossly disproportional share of polluting industrial facilities.

Rank	State	Complaints Filed
1	**Texas**	**12**
2	California	11
3	Alabama	10
4	Louisiana	8
5	Michigan	7
16-25	Connecticut	1 (tied)
16-25	Florida	1 (tied)
16-25	Hawaii	1 (tied)
16-25	Kansas	1 (tied)
16-25	Maine	1 (tied)
16-25	Maryland	1 (tied)
16-25	New Mexico	1 (tied)
16-25	Ohio	1 (tied)
16-25	Oklahoma	1 (tied)
16-25	Oregon	1 (tied)

Note: No complaints were filed in 25 states.

Source: U.S. Environmental Protection Agency, Title VI complaints filed as of October 1, 1999.

1 "CRITERIA AIR POLLUTANT" EMISSIONS

Texas leads the nation in emissions of "criteria air pollutants." These pollutants include nitrogen oxides (causing smog and acid rain), sulfur dioxide (acid rain), volatile organic compounds (smog), carbon monoxide (a poison robbing the body of oxygen) and particulates (lung cancer). Criteria pollutants cause or aggravate such health problems as asthma, emphysema, lung cancer and heart disease. These diseases take a disproportionate toll on children, the elderly and people with pre-existing respiratory problems. Criteria air pollutants cause property and crop damage and cloud scenic views. Texas is No. 1 in nitrogen oxide and volatile organic compound emissions, No. 2 in carbon monoxide and particulate emissions and No. 5 in sulfur dioxide emissions.

	Rank	State	Tons / Year
	**1**	**Texas**	**14,434,000**
	2	California	13,109,000
	3	Florida	9,077,000
	4	Ohio	8,528,000
	5	Georgia	7,173,000
	46	New Hampshire	716,000
	47	Hawaii	510,000
	48	Delaware	491,000
	49	Vermont	431,000
	50	Rhode Island	344,000

Texas is No. 29 in "criteria air pollutant" emissions *per person*. Some 58 percent of the U.S. population lives in states with less of this pollution on a per capita basis.

	Rank	State	Annual Lbs. Per Person
	1	Alaska	10,052
	2	New Mexico	7,510
	3	Wyoming	6,641
	4	Montana	5,178
	5	North Dakota	4,879
	29	**Texas**	**1,464**
	46	Connecticut	791
	47	Massachusetts	756
	48	New Jersey	720
	49	New York	698
	50	Rhode Island	697

Source: Environmental Protection Agency, "National Air Pollutant Emission Trends," Washington, D.C., March 2000, Table 2-2, pp. 2-8.

Website: www.epa.gov/ttn/chief/trends98/chapter2.pdf

2 OZONE POLLUTION EXPOSURE

Ozone pollution forms when sunlight turns nitrogen oxides and volatile organic compounds into a dangerous airborne cocktail. Ozone is a corrosive lung, eye and throat irritant. It exacerbates asthma, emphysema and heart conditions. Ozone also has a corrosive effect on plants and property. Under new federal standards, Texas exposes more people to elevated ozone levels than every other state except California. Houston supplanted Los Angeles as the nation's smog capital in 1999, when it led the nation in the percentage of days in which its air had unhealthy ozone levels (13 percent). As of August 2000, Los Angeles was positioning itself to reclaim the title for the highest number of bad-ozone days. Houston was surpassing Los Angeles again, however, for the single highest concentrations of ozone.

Rank	State	No. of People Exposed
1	California	22,549,430
2	**Texas**	**10,361,238**
3	Pennsylvania	9,186,177
4	Ohio	8,401,120
5	New York	6,045,264
28	Maine	510,142
29	West Virginia	508,032
30	Mississippi	258,952
31	Rhode Island	162,103
32	Arkansas	49,559

Note: Eighteen states are free of any areas that fail federal ozone standards.

Source: Mardock, Jayne, and Gina Porreco, Smog Watch 2000, "Dirty Smog Spots and Clean Air Solutions," Clean Air Network, Washington, D.C., June, 2000, p. 11.

Website: www.cleanair.net/smogwatch2000.htm

3 TOXIC & CANCEROUS AIR EMISSIONS

The federal Environmental Protection Agency established the Toxic Release Inventory (TRI) to track industry's use and disposal of some of the country's most dangerous chemicals. Texas regularly tops the national charts for TRI manufacturing emissions. The 111 million pounds of TRI chemicals that the state's industrial facilities released into Texas skies in 1998 far surpassed the TRI air pollution of any other state.

Rank	State	All TRI Air Emissions (Lbs./Year)
1	**Texas**	**110,705,485**
2	Tennessee	77,905,764
3	Louisiana	75,490,120
4	Ohio	63,602,506
5	Utah	61,208,838
46	Wyoming	1,708,858
47	New Mexico	1,531,690
48	Rhode Island	1,433,349
49	Hawaii	376,116
50	Vermont	189,210

Some of the most dangerous TRI chemicals are those that scientists have linked to cancers in animals or humans. Carcinogens account for 13 percent of Texas' total TRI air emissions. Texas manufacturing industries release more of these carcinogens directly into the air than any other state. Such direct emissions do not include the clouds of "indirect" carcinogens vented into Texas skies by industrial incinerators (see the "Toxic & Hazardous Waste" section).

Rank	State	Cancerous TRI Air Emissions (Lbs./Year)
1	**Texas**	**14,537,688**
2	Indiana	12,683,207
3	Tennessee	12,466,868
4	Ohio	8,341,274
5	Pennsylvania	7,948,663
46	New Mexico	135,494
47	Wyoming	55,173
48	Alaska	30,370
49	Hawaii	14,327
50	Vermont	12,730

Source: U.S. Environmental Protection Agency 1998 Toxic Release Inventory data.
Website: http://www.epa.gov/tri/tri98/data/rlme98atold2.pdf

4 CARBON DIOXIDE EMISSIONS

Most scientists not employed by the energy industry agree that "greenhouse gas" emissions contribute to "global warming" by trapping a greater share of the sun's heat around the earth. Chief among these gases is carbon dioxide, a waste product released when fossil fuels are burned. Possible long-term risks of global warming include flooded coasts, northern migrations of tropical diseases, major shifts in food production and more destructive hurricanes and tornadoes. Texas leads the nation in carbon dioxide emissions, producing almost twice as much as California (which has many more people). If Texas seceded, it would be No. 7 in the world in carbon dioxide emissions.

Rank	State	Millions of Metric Tons / Year
1	**Texas**	**175**
2	California	91
3	Ohio	68
4	Pennsylvania	63
5	Louisiana	60
46	Hawaii	4.3
47	Idaho	3.8
48	South Dakota	3.4
49	Rhode Island	3.2
50	Vermont	1.7

Source: U.S. Environmental Protection Agency, 1997 emissions data.
Website: http://yosemite.epa.gov/globalwarming/ghg.nsf/emissions/state

5 "HAZARDOUS AIR POLLUTANTS" EMISSIONS

Hazardous Air Pollutants (HAPs) are particularly potent toxins such as mercury, chromium, benzene, dioxins and furans. Pound for pound, they are much more dangerous than the criteria pollutants discussed earlier. About half of the 188 HAPs compounds are carcinogens; scientists have linked a third of HAPs chemicals to reproductive or developmental problems. Many HAPs "bioaccumulate," reaching ever-greater concentrations as they ascend the food chain from plants to animals. Texas leads the nation in HAPs emissions. Major industrial plants produce half of these emissions; the remainder comes from small businesses, vehicles and machinery.

	State	Rank	Tons Released
	**1**	**Texas**	**506,367**
	2	California	491,166
	3	New York	267,090
	4	Ohio	256,532
	5	Illinois	245,986
	46	North Dakota	16,738
	47	Wyoming	16,350
	48	South Dakota	15,272
	49	Hawaii	14,850
	50	Vermont	11,928

Source: U.S. Environmental Protection Agency, "National Air Pollutant Emission Trends," Washington, D.C., March 2000, Table 7-5. pp. 7-23, (data cover 1990-1993).

Website: www.epa.gov/ttn/chief/trends98/chapter7.pdf

6 MERCURY AIR EMISSIONS

Texas is No. 1 in overall mercury emissions, accounting for more than 11 percent of the nation's total. It is No. 2 in mercury air emissions. Coal-burning power plants account for the vast majority of the 180,000 pounds of mercury released into the U.S. environment each year (see the "Energy Use" section). They release mercury into the air through smokestacks with inadequate pollution controls or into water when it leaches out of coal ash that is discarded or used to make cement, fertilizer or wallboard. Fish "bioaccumulate" mercury to levels that reach a million times the mercury concentrations found in the surrounding water. Women who eat these fish poison their children by passing mercury through the placenta and breast milk. Mercury poisoning interferes with walking, talking and memory.

Rank	State	Air (Lbs.)	Total (Lbs.)
1	Pennsylvania	9,967	17,745
2	**Texas**	**9,072**	**20,054**
3	Ohio	7,881	15,156
4	Illinois	6,252	9,590
5	Indiana	5,229	9,940
39	Delaware	309	474
40	Oregon	140	255
41	New Hampshire	135	213
42	South Dakota	63	100
43	Alaska	11	21

Note: No. 43 is last because seven states report negligible mercury air emissions.

Source: Environmental Working Group, "Mercury Falling, An Analysis of Mercury Pollution from Coal Burning Power Plants," Washington, D.C., November 1999, p. 12, data cover 1998.

Website: www.ewg.org/pub/home/reports/mercuryfalling/MercuryFalling.pdf

7 AMMONIA AIR EMISSIONS

The nation's leading producer of animal manure, Texas is absorbing an escalating share of the nation's poultry and hog animal factories, many of which wore out their welcomes in other states. In industrial-sized volumes, this waste emits ammonia, hydrogen sulfide and other gases that degrade the standards of living and property values of neighboring property owners. Ammonia gas, which irritates the lungs, skin and eyes, is corrosive to property and agricultural crops (see also the "Water Quality" section).

Rank	State	Tons in 1998
1	**Texas**	**511,000**
2	Iowa	305,000
3	Nebraska	241,000
4	Kansas	232,000
5	Oklahoma	222,000
46	Maine	8,000
47	Hawaii	7,000
48	New Hampshire	3,000
49	Rhode Island	2,000
50	Alaska	1,000

Source: U.S. Environmental Protection Agency, "National Air Pollutant Emission Trends, 1990-1998" Washington, D.C., March 2000, pp. 2-8.

Website: www.epa.gov/ttn/chief/trends98/chapter2.pdf

8 PER CAPITA SPENDING ON AIR QUALITY

Texas—which has the second highest number of people living in areas with unhealthy air—ranks No. 18 in per capita spending on air quality programs. California, with the nation's worst air pollution problem, has the best air pollution control programs in the country. It spends 33 percent more per person ($3.45) than Texas to control this problem. Texas' per capita expenditure slightly exceeds the national average ($2.41).

	Rank	State	Spending Per Person
	1	Alaska	$9.88
	2	Delaware	$6.18
	3	Montana	$5.13
	4	Oregon	$4.98
	5	Wyoming	$4.38
	18	**Texas**	**$2.60**
	46	Nebraska	$1.26
	47	Missouri	$1.24
	48	South Dakota	$1.12
	49	North Dakota	$0.82
	50	Kansas	$0.71

Source: Council of State Governments, "Resource Guide to State Environmental Management," Lexington, KY, 1996, p. 34, data cover fiscal year 1996.

1 CLEAN-WATER-PERMIT VIOLATORS

Texas is No. 1 in the *number* of large facilities (such as factories and sewage treatment plants) that are in "significant noncompliance" with their Clean-Water permits, which govern the discharge of pollution into surface waters.

Rank	State	Number of Permit Violators
1	**Texas**	**159**
2	Ohio	128
3	Alabama	88
4	New York	87
5	Michigan	79
46-47	Hawaii	1
46-47	North Dakota	1
48-50	Delaware	0
48-50	Nevada	0
48-50	Wyoming	0

Texas is No. 19 in the *percentage* of facilities significantly violating their permits. Some 61 percent of the U.S. population lives in states that have a lower percentage of significant violations.

Rank	State	Percentage of Permit Violators
1	Utah	68 %
2	Tennessee	51 %
3	Vermont	47 %
4	Ohio	46 %
5	Nebraska	45 %
19	**Texas**	**28 %**
46-47	Hawaii	4 %
46-47	North Dakota	4 %
48-50	Delaware	0 %
48-50	Nevada	0 %
48-50	Wyoming	0 %

Source: U.S. Environmental Protection Agency, Enforcement, Planning, Targeting and Data Division, Washington, D.C., data cover 1999.

2 TOXIC & CANCEROUS WATER EMISSIONS

The federal Environmental Protection Agency established the Toxic Release Inventory (TRI) to track the use and disposal of certain toxic chemicals by U.S. manufacturing plants. Texas ranks No. 1 in the annual amount of TRI chemicals that manufacturing plants discharge into water. This includes surface water releases and injection wells, which each make up about half of all TRI water emissions. Texas ranks No. 1 in emissions injected into wells and No. 3 in surface water discharges.

Rank	State	All TRI Water Emissions (Lbs./Year)
1	**Texas**	**113,356,561**
2	Louisiana	89,999,028
3	Pennsylvania	45,483,216
4	Florida	29,522,153
5	Ohio	19,108,650
46	New Mexico	12,508
47	Hawaii	5,906
48	Arizona	5,042
49	Rhode Island	1,465
50	Nevada	0

Among the most dangerous TRI chemicals are those that scientists have linked to cancers in animals and humans. Texas ranks No. 2 in the amount of TRI carcinogens that manufacturing industries dump into water. Texas pumps more than 99 percent of its TRI water carcinogens into underground injection wells.

Rank	State	TRI Cancerous Water Emissions (Lbs./Year)
1	Louisiana	13,096,646
2	**Texas**	**9,047,426**
3	Ohio	2,665,246
4	Arkansas	378,810
5	Michigan	246,992
46	Arizona	10
47	North Dakota	8
48-50	Alaska (tied)	0
48-50	Hawaii (tied)	0
48-50	Nevada (tied)	0

Source: U.S. Environmental Protection Agency, 1998 Toxic Release Inventory data.
Website: www.epa.gov/tri/tri98/data/rlme98atold2.pdf

3 PER CAPITA SPENDING ON WATER QUALITY

Although it leads the nation in toxic water emissions, Texas ranked No. 49 in per capita expenditures on water quality and resources (including drinking water) in 1996. While states with high per capita investments in water quality tend to be sparsely populated states, heavily populated California ranks No. 5 in per capita spending on water quality.

	Rank	State	Spending Per Person
	1	Wyoming	$57.83
	2	Delaware	$50.15
	3	Wisconsin	$42.44
	4	Vermont	$40.15
	5	California	$40.09
	46	Michigan	$3.80
	47	North Carolina	$3.65
	48	Indiana	$3.56
	**49**	**Texas**	**$3.35**
	50	New York	$2.36

Source: Council of State Governments, "Resource Guide to State Environmental Management," Lexington, KY, 1996, pp. 34-35.

4 WATER-QUALITY PLANNING

Besides contamination by factories and sewage treatment plants, water is polluted by agricultural runoff (pesticides, fertilizers and manure) and by washed-out toxic air pollution such as mercury from coal-burning power plants. Federal law requires states to implement plans to control such "non-point source" pollution, but few states have devised credible plans. A recent study by the National Wildlife Federation gave Texas a failing grade for its water-quality planning, with Texas ranking No. 38 nationwide.

	Rank	State
	1	Massachusetts
	2	Oregon
	3	Maine
	4	North Carolina
	5	Kentucky
	38	**Texas**
	46	Idaho
	47	Missouri
	48	Arkansas
	49	Hawaii
	50	Iowa

Source: National Wildlife Federation, "Pollution Paralysis, Code Red for Watersheds," Vienna, VA, April 2000, Table 3.

Website: www.nwf.org/watersheds/paralysis/pp2_report.pdf

5 ANIMAL MANURE

Texas—where ranchers tried to sue Oprah Winfrey for libeling their cattle—is absorbing an escalating share of the nation's poultry and hog animal factories. Texas is No. 1 in livestock manure production and its attendant pollution. Texas produces 12 percent of the 905 million tons of manure that the nation generates annually. Manure causes air pollutants, including ammonia, methane and deadly hydrogen sulfide. People who live or work near these plants report diseases like respiratory infection, headaches, and diarrhea. Water pollution from these operations is of industrial proportions. In Texas, at least 388 miles of rivers and 24,000 acres of lakes are contaminated by animal wastes.

	Rank	State	Tons of Manure (1997)
	**1**	**Texas**	**110,000,000**
	2	California	55,000,000
	3	Iowa	51,000,000
	4	Nebraska	47,000,000
	5	Kansas	46,000,000
	46	Massachusetts	780,000
	47	New Jersey	640,000
	48	New Hampshire	550,000
	49	Rhode Island	71,000
	50	Alaska	40,000

Source: Environmental Defense Fund, "Scorecard" website.
Website: www.scorecard.org/ranking

1 ENERGY CONSUMPTION

Texas leads the nation in the consumption of energy powered by such fuels as coal, oil, gas and nuclear power. The state is No. 1 in industrial energy consumption, No. 2 in residential and transportation energy consumption and No. 3 in commercial energy consumption. Factors that contribute to this staggering energy consumption include a large industrial sector, massive dependence on air conditioning, high travel rates spurred by urban sprawl and the lack of a conservation ethic in this oil-producing state.

Rank	State	Trillions of BTUs Used (1997)
1	**Texas**	**11,396**
2	California	7,728
3	Ohio	4,144
4-5	New York (tied)	4,093
4-5	Louisiana (tied)	4,093
46	Delaware	267
47	South Dakota	242
48	Hawaii	240
49	Rhode Island	235
50	Vermont	167

Note: A trillion BTUs, the energy in 8 million gallons of gas, can fuel 19,000 American cars for a year.

Texas, which ranks No. 4 in energy consumption *per person*, is one of just six states that lacks an energy code for new homes.

Rank	State	Millions of BTUs Per Capita
1	Alaska	1,144
2	Louisiana	940
3	Wyoming	892
4	**Texas**	**588**
5	North Dakota	555
46	Connecticut	243
47	California	240
48	Rhode Island	238
49	New York	225
50	Hawaii	201

Source: U.S. Department of Energy, Energy Information Administration, "State Energy Data Report 1997," July 2000, Washington, DC, 1997.

Website: www.eia.doe.gov/emeu/sedr/contents.html

2 ELECTRICITY CONSUMPTION

Texas leads the nation in electricity consumption and ranks No. 10 in *per capita* electricity consumption.

Rank	State	Trillions of BTUs Used (1997)
1	**Texas**	**978**
2	California	778
3	Florida	597
4	Ohio	541
5	New York	450
46	North Dakota	28
47	South Dakota	27
48	Rhode Island	23
49	Vermont	18
50	Alaska	17

Note: A trillion BTUs is the energy required to run 200,000 refrigerators for a year.

Source: U.S. Department of Energy's Energy Information Administration, "State Energy Summaries," Washington, D.C., 1997.

Website: www.eia.doe.gov/emeu/sedr/contents.html

3 COAL CONSUMPTION

No other state rivals the 100 million tons of coal that Texas burns annually. It accounts for 10 percent of the nation's total coal consumption. On a *per capita* basis, Texas ranks No. 17. Most of the states with larger rates of per capita coal consumption have much smaller populations. For this reason, 74 percent of the U.S. population lives in states that burn less coal per capita than Texas. Coal burning is a major source of toxic mercury pollution (see the "Air Quality" section). Texas produces dirty lignite coal, which contributes to the state's poor air quality.

Rank	State	Tons (1998)
1	**Texas**	**99,430,000**
2	Indiana	66,296,000
3	Ohio	60,338,000
4	Pennsylvania	54,538,000
5	Illinois	44,630,000
46	Idaho	479,000
47	Hawaii	167,000
48	Maine	141,000
49	Vermont	109,000
50	Rhode Island	2,000

Source: U.S. Department of Energy, Energy Information Administration, Coal Annual 1998, Washington, D.C., 1999, Table 67.

Website: www.eia.doe.gov/cneaf/coal/cia/html/t67p01p1.html

4 CONSUMER ENERGY SPENDING

Although California has many more people than Texas, the total consumer energy expenditures of these two states is about the same. As a leading producer and processor of fossil fuels—which are inexpensive in Texas—the Lone Star State's high energy bills reflect heavy consumption rather than high energy costs.

	Rank	State	Total 1997 Spending ($ Millions)
	1	California	$55,187
	2	**Texas**	**$55,070**
	3	New York	$34,089
	4	Pennsylvania	$25,810
	5	Ohio	$25,556
	46	Wyoming	$1,873
	47	North Dakota	$1,699
	48	Delaware	$1,692
	49	South Dakota	$1,629
	50	Vermont	$1,368

Texans rank No. 4 in energy spending *per person*. This includes the highest residential electric bills in the country. Even though Texas has one of the cheapest fuel costs in the country, it ranks No. 25 in electricity rates. This is due in part to exorbitant cost overruns on the state's nuclear power plants.

	Rank	State	Per Capita Spending
	1	Wyoming	$3,902
	2	Alaska	$3,575
	3	Louisiana	$3,473
	4	**Texas**	**$2,841**
	5	North Dakota	$2,651
	46	Washington	$1,840
	47	Utah	$1,795
	48	Colorado	$1,768
	49	California	$1,715
	50	Florida	$1,711

Source: U.S. Department of Energy, Energy Information Administration, "State Energy Price and Expenditure Report 1997," July 2000, Washington, DC, 1997.

Website: www.eia.doe.gov/emeu/seper/contents.html

1 VEHICLE MILES TRAVELED

"Vehicle miles traveled" is an indicator of human dependence on motorized vehicles. Texas' No. 2 ranking reflects poor urban planning and a lack of investment in mass transit. While New York's population approaches that of Texas, it racks up 40 percent fewer vehicle miles traveled. Texas has some of the nation's most vehicle-dependent cities, including three of the 10 major U.S. metropolitan areas with the highest per capita mileage: Houston (No. 1), Austin (No. 5) and Dallas/Fort Worth (No. 8).

Rank	State	Millions of Miles
1	California	286,442
2	**Texas**	**206,023**
3	Florida	137,495
4	New York	123,376
5	Ohio	104,923
46	Hawaii	7,987
47	Rhode Island	7,983
48	North Dakota	7,333
49	Vermont	6,596
50	Alaska	4,514

Texas is No. 24 in *per capita* vehicle miles traveled. Two-thirds of the U.S. population lives in states that are less dependent on motorized transportation.

Rank	State	Miles Per Person
1	Wyoming	16,730
2	New Mexico	12,802
3	Georgia	12,706
4	Alabama	12,688
5	Oklahoma	12,586
24	**Texas**	**10,451**
46	Rhode Island	8,082
47	New Jersey	7,969
48	Alaska	7,337
49	New York	6,794
50	Hawaii	6,709

Source: Department of Transportation, Federal Highway Administration, "Highway Statistics 1998," Washington, DC, 1999, Table VM-2.

Website: http://www.fhwa.dot.gov/////////ohim/hs98/tables/vm2.pdf

2 SPENDING ON ALTERNATIVE TRANSPORTATION

All states spend most of their federal highway funds on building and maintaining roads. Texas is tied for 22nd place in the percentage of its federal transportation money that it spends on such alternative transportation as bike lanes and mass transit. Some 62 percent of the U.S. population lives in states that spend a greater share of federal funds on alternative transportation.

	Rank	State	Funds Spent on Alternatives (%)
	1	New York	47 %
	2	Utah	46 %
	3	New Jersey	37 %
	4-5	California (tied)	36 %
	4-5	Massachusetts (tied)	36 %
	22-24	Arizona (tied)	12 %
	22-24	Nevada (tied)	12 %
	22-24	**Texas (tied)**	**12 %**
	44-48	Idaho (tied)	4 %
	44-48	Mississippi (tied)	4 %
	44-48	North Dakota (tied)	4 %
	44-48	South Carolina (tied)	4 %
	44-48	South Dakota (tied)	4 %
	49-50	Montana (tied)	3 %
	49-50	Wyoming (tied)	3 %

Source: Surface Transportation Policy Project, "Changing Direction," Washington, DC, March, 2000, Table 2, data cover 1998 through 1999.

Website: www.transact.org/Reports/Cd/tea21color.pdf

3 TRANSPORTATION & LAND-USE PLANNING

A 1999 Sierra Club report ranked states on the quality of their transportation planning. The report assessed such indicators as investments in non-road transportation alternatives as well as how well states managed to reduce per capita vehicle mileage. Texas ranked No. 31. Some 71 percent of the U.S. population lives in states that got a better rating.

Transportation Planning

Rank	State
1	Rhode Island
2	New Jersey
3	Hawaii
4	Washington
5	California
31	**Texas**
46	Tennessee
47	Alabama
48	Oklahoma
49	Mississippi
50	Arkansas

The same report ranked state laws and policies governing land-use planning. Texas ranked No. 37.

Land-Use Planning

Rank	State
1	Oregon
2	Vermont
3	Maryland
4	Georgia
5	Washington
37	**Texas**
46	Ohio
47	North Carolina
48	North Dakota
49	Michigan
50	Wyoming

Source: Sierra Club, "Solving Sprawl," San Francisco, CA, October 1999.
Website: www.sierraclub.org/sprawl/transportation/index.asp

4 NUMBER OF FLOOD DEATHS

Low-lying marshes and swamps serve as nature's drainage and flood-control system. When human development fills in wetlands, surrounding areas become more vulnerable to flooding. Over Texas' history, development has wiped out half of the state's wetlands (some 8.4 million acres that would cover an area larger than Maryland). Historically, only Florida has sacrificed more wetland acres. In the 10 years ending in 1998, Texas ranked No. 1 in the number of flood deaths, accounting for 16 percent of the nation's total flood body count. Texas ranked No. 8 in total flood property damages ($2 billion).

Rank	State	Deaths ('89-'98)
1	**Texas**	**145**
2	Missouri	64
3	Ohio	60
4	California	59
5	Georgia	49
45-48	Connecticut (tied)	1
45-48	Idaho (tied)	1
45-48	New Hampshire (tied)	1
45-48	Utah (tied)	1
49-50	Alaska (tied)	0
49-50	Rhode Island (tied)	0

Source: Sierra Club, "Permitting Disaster in America," Madison, WI, March 2000.
Website: www.sierraclub.org/wetlands/flooding/index.asp

5 PARK SPENDING & ACREAGE

Texas ranked No. 49 in per capita *spending* on parks in 1998. A recent *Austin American-Statesman* investigation revealed that this park land is poorly maintained as a result of woefully inadequate funding.

Rank	State	Spending Per Capita
1	New Jersey	$76.31
2	Louisiana	$63.31
3	Mississippi	$50.39
4	Delaware	$47.35
5	Maryland	$46.28
46	Iowa	$6.87
47	Michigan	$4.75
48	Alabama	$4.65
49	**Texas**	**$3.36**
50	Kansas	$2.35

Texas ranks No. 24 in per capita *acres* of park land.

Rank	State	Acres Per 100 People
1	Alaska	540.20
2	Maine	47.14
3	Wyoming	26.46
4	New Hampshire	13.13
5	South Dakota	12.86
24	**Texas**	**3.25**
46	Virginia	0.98
47	Georgia	0.95
48	Rhode Island	0.91
49	Louisiana	0.90
50	Mississippi	0.88

Source: Bureau of Census, "Statistical Abstract of the United States 1999," Washington, D.C., 1999, p. 263.

Website: www.census.gov/govs/state

6 PER CAPITA VISITS TO STATE PARKS

Texas ranked No. 45 in per capita visits to its state parks in 1997. Texans make an average of one trip a year to a state park.

	Rank	State	Annual Visits Per Person
	1	Hawaii	12.7
	2	Oregon	12.1
	3	South Dakota	8.8
	4	Washington	8.5
	5	Alaska	6.6
	45	**Texas**	**1.1**
	46	Florida	0.9
	47	New Hampshire	0.8
	48	Virginia	0.7
	49	Arizona	0.5
	50	Louisiana	0.3

Source: U.S. Bureau of Census, "Statistical Abstract of the United States 1999," Washington, D.C., 1999, p. 263.

Website: www.census.gov/prod/99pubs/99statab/sec07.pdf

7 OPEN SPACE PROTECTIONS

A 1999 Sierra Club report ranked states according to the degree to which they protect open spaces. The criteria used includes the amount of farmland destroyed, the quality of agricultural zoning, floodplain development and the prevalence of so-called development-rights swaps, in which governments secure a desired tract of land as open space by granting a landowner development rights elsewhere. Texas ranked No. 46 in open space protection.

Rank	State
1	Maryland
2	New Jersey
3	Illinois
4	Oregon
5	Colorado
46	**Texas**
47	Louisiana
48	South Carolina
49	Alaska
50	West Virginia

Source: Sierra Club, "Solving Sprawl," San Francisco, October 1999.
Website: www.sierraclub.org/sprawl/reports99/openratings.asp