

National Resources Inventory

2001 Annual NRI

Urbanization and Development of Rural Land

July 2003

About the Data

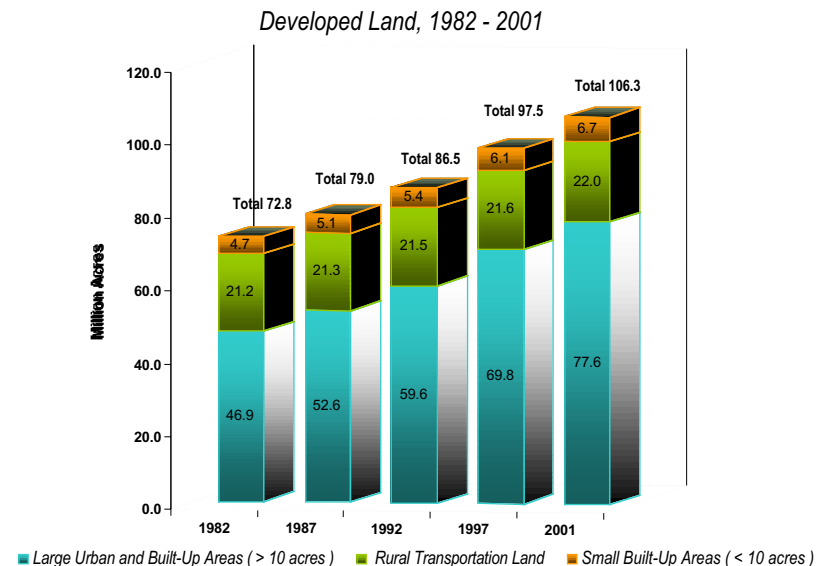
Estimates presented here are based upon the latest information from the National Resources Inventory (NRI). The NRI is a longitudinal sample survey based upon scientific statistical principles and procedures. It is conducted by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS), in cooperation with Iowa State University's Center for Survey Statistics and Methodology.

The results are the first available from the new Annual NRI. Previously, NRI data were collected at 800,000 sample sites every 5 years. Now the data are collected every year, but for slightly less than 25 percent of these same sample sites. The 2001 data are suitable only for analysis at a national scale because of this reduced sample size. As additional data are collected each year, results will become (over)

The National Resources Inventory (NRI) is a statistical survey of natural resource conditions and trends on nonfederal land in the United States - nonfederal land includes privately owned lands, tribal and trust lands, and lands controlled by State and local governments. The NRI provides nationally consistent statistical data on how these lands are used and on changes in land use patterns for the period 1982 – 2001. Of particular interest is the conversion of various rural lands into developed land. The NRI provides information on the types and quality of land being developed, and can be used to help assess the effects of these conversions.

Key Findings

- Between 1982 and 2001, about 34 million acres - an area the size of Illinois - were converted to developed uses. By 2001, the total developed area in the contiguous United States was slightly more than 106 million acres.
- The rate of development between 1997 and 2001 averaged 2.2 million acres per year. This was the same average rate experienced between 1992 and 1997, but up from 1.4 million acres per year in the previous decade (1982 - 1992).
- Between 1997 and 2001, almost 9 million acres were developed, of which 46 percent came from forest land, 20 percent from cropland, and 16 percent from pastureland.



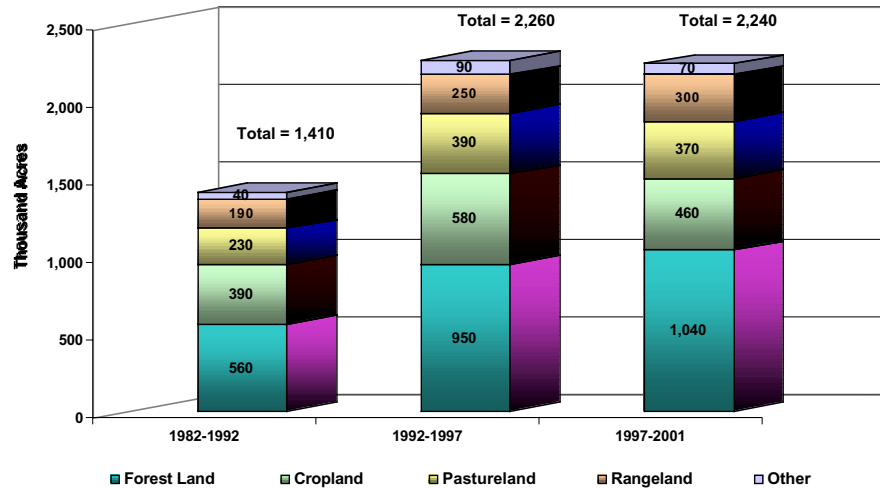
About the Data, cont.

available for regional, state, and sub-state analysis. Current estimates cover the contiguous 48 states. Future estimates will also cover Hawaii, Alaska, the Caribbean, and selected Pacific Basin islands. The findings on Urbanization and Development come from the NRI data category "Land Cover/Use" which comprises mutually exclusive categories such as cropland, pastureland, rangeland, forest land, other rural land, developed land, and water areas. The NRI uses this classification to account for each and every acre of nonfederal land within the Nation. Every parcel of land is described by one and only one of these categories.

Developed Land contains three Land Cover/use categories:

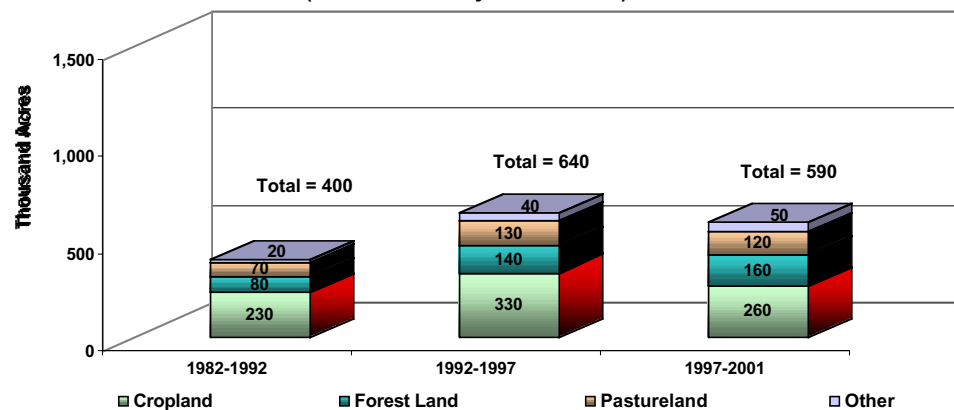
1. Large Urban & Built-up Areas (greater than 10 acres in size);
 2. Small built-up Areas (less than 10 acres in size);
 3. Rural Transportation Land (roads, railroads, and associated rights-of-way).
- (over)

Source of Developed Land
(Annual Acres by Time Period)



- Between 1997 and 2001, the rate of forest land and rangeland conversion to developed uses continued on an upward trend.
- The rate of cropland conversion between 1997 and 2001 declined by 21 percent relative to the previous 5-year period (1992 - 1997).
- In the period between 1992 and 2001, about 6 million acres (28 percent) of the new land developed was prime farmland. Between 1982 and 1992, about 4 million acres (29 percent) of the new land developed, was prime farmland.
- Correspondingly, the rate of prime farmland development increased from an average of 0.4 million acres per year between 1982 and 1992 to 0.6 million acres per year between 1992 and 2001. (see Land Use for more information on prime farmland).

Source of Developed Land That was Prime Farmland
(Annual Acres by Time Period)



- While cropland remains the major type of prime farmland being developed, its share of total prime farmland developed has declined. Between 1992 and 2001, 48 percent of the prime farmland developed was cropland, down from 57 percent in the period between 1982 and 1992.

About the Data, cont.

For the NRI, Developed Land areas are considered (permanently) removed from the rural land base. Other agencies and groups that collect seemingly similar data have different reasons for collecting data. This means that these other sources of data will show differences and similarities with NRI data. Thorough examination and analysis of the data from two differing sources can be beneficial and strengthen understanding of the issues.

The NRI approach to conducting inventories facilitates examining trends in rural and developed land uses over time because –

- the same data have been collected since 1982 [definitions and protocols have remained the same],
- the inventory accounts for 100 percent of the surface area,
- quality assurance and statistical procedures are designed to ensure that trend data are scientifically legitimate and unambiguous, and
(over)

Importance to the Nation

The impact of development on rural nonfederal land is a concern in the balancing of development needs with conservation of natural resources. This is an especially important consideration when the lands best suited to producing food and fiber come under development.

Conversion of agricultural land to developed uses can also result in fragmentation of landscapes, leading to diminished values for wildlife, water management, open space, and aesthetic purposes, among others.

More Information

For more information about the NRI, visit <http://www.nrcs.usda.gov/technical/NRI/>

See the 2001 Annual NRI Glossary for definitions of key terms:
<http://www.nrcs.usda.gov/technical/land/nri01/glossary.html>

To obtain State and local 1997 NRI data, contact your NRI coordinator. Links to State NRI websites and contact information can be found at:
http://www.nrcs.usda.gov/technical/NRI/1997/obtain_data.html

Send comments and questions to nri@nhq.nrcs.usda.gov

Developed Land by Type and Year in Millions of Acres, with Margins of Error

Year	Large Urban and Built-Up Areas	Small Built-Up Areas	Rural Transportation Land	Total Developed Land
1982	46.9 ± 0.7	4.7 ± 0.1	21.2 ± 0.2	72.8 ± 0.7
1987	52.6 ± 0.8	5.1 ± 0.1	21.3 ± 0.2	79.0 ± 0.8
1992	59.6 ± 0.8	5.4 ± 0.1	21.5 ± 0.2	86.5 ± 0.9
1997	69.8 ± 0.9	6.1 ± 0.1	21.6 ± 0.2	97.5 ± 0.9
2001	77.6 ± 1.1	6.7 ± 0.1	22.0 ± 0.2	106.3 ± 1.1

About the Data, cont.

- it is easy to track lands as they go from one land-use category to another.

Irrespective of the scale of analysis, margins of error must be considered. Margins of error are presented for all NRI estimates. ■

Sources of Newly Developed Land in Thousands of Acres, with Margins of Error

Year	Cropland	Pastureland	Rangeland	Forest Land	All Other Land Uses	Total
1982 to 1992 (10 years)	3,900 ± 160	2,270 ± 120	1,950 ± 190	5,600 ± 170	360 ± 50	14,080 ± 330
1992 to 1997 (5 years)	2,880 ± 110	1,930 ± 100	1,270 ± 130	4,740 ± 140	470 ± 50	11,290 ± 250
1997 to 2001 (4 years)	1,830 ± 170	1,470 ± 170	1,210 ± 290	4,150 ± 340	280 ± 70	8,940 ± 550

Prime Farmland by Land Use and Year in Millions of Acres, with Margins of Error

Year	Cropland	Pastureland	Forest Land	All Other Land Uses	Total
1982	231.5 ± 3.4	37.7 ± 1.4	46.9 ± 1.7	26.0 ± 1.3	342.1 ± 4.0
1987	226.8 ± 3.4	37.1 ± 1.4	47.2 ± 1.7	28.7 ± 1.3	339.8 ± 4.0
1992	217.0 ± 3.3	37.2 ± 1.4	47.6 ± 1.7	34.7 ± 1.3	336.5 ± 4.0
1997	213.5 ± 3.3	35.4 ± 1.4	48.8 ± 1.7	34.9 ± 1.3	332.6 ± 4.0
2001	209.4 ± 3.3	35.1 ± 1.4	50.0 ± 1.7	35.1 ± 1.3	329.6 ± 4.0

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Sources of Newly Developed Land that was Prime Farmland in Thousands of Acres, with Margins of Error

Year	Cropland	Pastureland	Forest Land	All Other Land Uses	Total
1982 to 1992 (10 years)	2,290 ± 130	700 ± 60	840 ± 70	180 ± 30	4,010 ± 160
1992 to 1997 (5 years)	1,670 ± 90	630 ± 60	700 ± 50	210 ± 30	3,210 ± 120
1997 to 2001 (4 years)	1,030 ± 120	500 ± 80	640 ± 90	190 ± 60	2,360 ± 180