



SYSTEM DIMENSIONS	CHEMICAL AND PHYSICAL	BIOLOGICAL COMPONENTS	HUMAN USES
Extent Pattern	Nutrients, Carbon, Oxygen Contaminants Physical	Plants and Animals Communities Ecological Productivity	Food, Fiber, and Water Recreation and Other Services

## ⊖ Fragmentation of Farmland Landscapes by Development

### What Is This Indicator, and Why Is It Important?

This indicator would report the degree to which suburban development and other built-up areas break up (fragment) the farmland landscape (croplands plus intermingled “natural” areas such as forests, wetlands, and grasslands and shrublands). Areas with a mosaic of cropland and intermingled natural areas—but little or no development—would be rated as “low” on the “fragmentation index” used for this indicator, while those in which small patches of cropland are mixed into a backdrop of suburban development would be rated as “high.” These data would be presented nationally, as above, and by region for the most current year.

Housing and other development in farmland areas may compromise the economic viability of farming. Low-density, scattered development requires a great deal of surface area for roads and infrastructure, spreading over a relatively large proportion of the farmland landscape. Commuter traffic on rural roads produces dangerous conflicts with slow-moving farm machinery, and new residents may object to long-standing farm practices such as manure spreading. Development also typically increases nearby land values and, in some states, the property taxes on farmland, thereby increasing incentives for farmers to sell their land for further development. Finally, some development can diminish the aesthetic quality and recreation potential of formerly pastoral landscapes.

This indicator was selected to address the ability of farmland landscapes to produce goods for human benefit. It does not address how such fragmentation affects wildlife or other environmental values; for this, see p. 94.

**Why Can't This Indicator Be Reported at This Time?** The satellite land cover data necessary to report this index are available, but the data have not yet been analyzed.

The technical note for this indicator is on page 231.

