

# Package ‘usfertilizer’

April 2, 2018

**Type** Package

**Title** County-Level Estimates of Fertilizer Application in USA

**Version** 0.1.5

**Maintainer** Wenlong Liu <wliu14@ncsu.edu>

**Description** Compiled and cleaned the county-level estimates of fertilizer, nitrogen and phosphorus, from 1945 to 2012 in United States of America (USA). The commercial fertilizer data were originally generated by USGS based on the sales data of commercial fertilizer. The manure data were estimated based on county-level population data of livestock, poultry, and other animals. See the user manual for detailed data sources and cleaning methods. 'usfertilizer' utilized the tidyverse to clean the original data and provide user-friendly dataframe. Please note that USGS does not endorse this package. Also data from 1986 is not available for now.

**License** GPL

**URL** <https://github.com/wenlong-liu/usfertilizer>

**BugReports** <https://github.com/wenlong-liu/usfertilizer/issues>

**Depends** R (>= 2.10)

**Imports** tidyverse

**Suggests** knitr, rmarkdown

**Encoding** UTF-8

**LazyData** false

**RoxygenNote** 6.0.1

**VignetteBuilder** knitr

**NeedsCompilation** no

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**Repository** CRAN

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### Description

usfertilizer.

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### Description

This is data adapted from the county-level estimates of fertilizer nitrogen and phosphorus based on commercial sales from 1945 to 2012. Please visit [here](<https://www.sciencebase.gov/catalog/item/5851b2d1e4b0f99207c4f>) for more details.

### Usage

us\_fertilizer\_county

### Format

A data frame with 582012 rows and 11 variables:

**FIPS** FIPS is a combination of state and county codes, in character format.

**State** The state abbr. of U.S.

**County** County name in U.S.

**ALAND** The land area in each county, unit: km squared

**AWATER** The water area in each county, unit: km squared

**INTPTLAT** The latitude of centriod in each county, e.g. 32.53638

**INTPTLONG** The longitude of centriod in each county, e.g. -86.64449

**Quantity** The quantity of fertilization as N or P, e.g. kg N or kg P

**Year** The year of estimated data, e.g. 1994

**Nutrient** The fertilizer type, e.g. N or P

**Farm.Type** The land use type of fertilizer, e.g. farm and nonfarm

**Input.Type** The input type of nutrient, e.g. Fertilizer or Manure ...

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### **Examples**

```
require(usfertilizer)  
data(us_fertilizer_county)
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