

# Package ‘arcos’

February 19, 2021

**Type** Package

**Title** Load ARCOS Prescription Data Prepared by the Washington Post

**Version** 1.27

**Date** 2021-02-18

**URL** <https://github.com/wpinvestigative/arcos>

**BugReports** <https://github.com/wpinvestigative/arcos/issues>

**Description** A wrapper for the 'ARCOS API' <[https://arcos-api.ext.nile.works/\\_\\_swagger\\_\\_/](https://arcos-api.ext.nile.works/__swagger__/)> that returns raw and summarized data frames from the Drug Enforcement Administration's Automation of Reports and Consolidated Orders System, a database that monitors controlled substances transactions between manufacturers and distributors which was made public by The Washington Post and The Charleston Gazette-Mail.

**License** MIT + file LICENSE

**Encoding** UTF-8

**LazyData** true

**Depends** R (>= 3.3.0)

**Suggests** ggplot2, forcats, leaflet, knitr, sf, tigris, testthat (>= 2.1.0), rmarkdown, data.table, formattable, geofacet, lubridate, scales, viridis, zoo

**Imports** stringr, magrittr, jsonlite, dplyr, tidyr, urltools, httr, curl, vroom

**RoxygenNote** 7.1.1

**VignetteBuilder** knitr

**NeedsCompilation** no

**Author** Steven Rich [aut, ctb],  
Andrew Ba Tran [aut, cre],  
Aaron Williams [aut, ctb],  
Jason Holt [ctb],  
The Washington Post [cph],  
The Charleston Gazette-Mail [cph]

**Maintainer** Andrew Ba Tran <[andrew.tran@washpost.com](mailto:andrew.tran@washpost.com)>

Repository CRAN

Date/Publication 2021-02-18 23:20:02 UTC

## R topics documented:

arcos . . . . .	2
buyer_addresses . . . . .	3
buyer_details . . . . .	4
buyer_list . . . . .	4
combined_buyer_annual . . . . .	5
combined_buyer_monthly . . . . .	6
county_list . . . . .	7
county_population . . . . .	8
county_raw . . . . .	8
county_raw_fips . . . . .	9
drug_county_biz . . . . .	10
drug_fips_biz . . . . .	11
drug_list . . . . .	12
not_pharmacies . . . . .	13
pharmacy_raw . . . . .	13
pharm_cbsa . . . . .	14
pharm_counties . . . . .	15
pharm_latlon . . . . .	16
pharm_tracts . . . . .	16
raw_data . . . . .	17
reporter_addresses . . . . .	18
state_population . . . . .	19
summarized_county_annual . . . . .	19
summarized_county_monthly . . . . .	20
total_distributors_county . . . . .	21
total_distributors_state . . . . .	22
total_manufacturers_county . . . . .	23
total_manufacturers_state . . . . .	24
total_pharmacies_county . . . . .	24
total_pharmacies_state . . . . .	25
<b>Index</b>	<b>27</b>

---

arcos

arcos *package*

---

## Description

Download and use data from ARCOS, raw or summarized by the Washington Post, in R

**Author(s)**

Andrew Ba Tran (@abtran)

Steven Rich (@dataeditor)

Aaron Williams (@aboutaaron)

---

buyer_addresses	<i>Get DEA designated addresses for each pharmacy based on BUYER_DEA_NO (Only includes retail and chain pharmacy designations)</i>
-----------------	--

---

**Description**

Get DEA designated addresses for each pharmacy based on BUYER\_DEA\_NO (Only includes retail and chain pharmacy designations)

**Usage**

```
buyer_addresses(county = "Mingo", state = "WV", key = "WaPo")
```

**Arguments**

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other geocoded data: [county\\_population\(\)](#), [not\\_pharmacies\(\)](#), [pharm\\_cbsa\(\)](#), [pharm\\_counties\(\)](#), [pharm\\_latlon\(\)](#), [pharm\\_tracts\(\)](#), [reporter\\_addresses\(\)](#), [state\\_population\(\)](#)

**Examples**

```
library(arcos)

mingo_wv <- buyer_addresses(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

buyer_details	<i>Get monthly summarized pill totals by county</i>
---------------	---

---

### Description

Get monthly summarized pill totals by county

### Usage

```
buyer_details(county = "Mingo", state = "WV", key = "WaPo")
```

### Arguments

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

### See Also

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other summarized: `combined_buyer_annual()`, `combined_buyer_monthly()`, `summarized_county_annual()`, `summarized_county_monthly()`, `total_distributors_county()`, `total_distributors_state()`, `total_manufacturers_county()`, `total_manufacturers_state()`, `total_pharmacies_county()`, `total_pharmacies_state()`

### Examples

```
library(arcos)

mingo_wv <- buyer_details(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

buyer_list	<i>Get list of business types listed in the BUYER_BUS_ACT in the ARCOS database</i>
------------	---

---

### Description

Get list of business types listed in the BUYER\_BUS\_ACT in the ARCOS database

**Usage**

```
buyer_list(key = "WaPo")
```

**Arguments**

key                    Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other raw data: [county\\_list\(\)](#), [county\\_raw\\_fips\(\)](#), [county\\_raw\(\)](#), [drug\\_county\\_biz\(\)](#), [drug\\_fips\\_biz\(\)](#), [drug\\_list\(\)](#), [pharmacy\\_raw\(\)](#), [raw\\_data\(\)](#)

**Examples**

```
library(arcos)

bl <- buyer_list(key="WaPo")

head(bl)
```

---

combined\_buyer\_annual    *Get annual total pills for each buyer (pharmacy, etc) in a county*

---

**Description**

Get annual total pills for each buyer (pharmacy, etc) in a county

**Usage**

```
combined_buyer_annual(county = "Mingo", state = "WV", key = "WaPo")
```

**Arguments**

county                Filter the data to only this county (e.g. 'Mingo')

state                  Filter the data to county within this state (e.g. 'WV')

key                    Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other summarized: [buyer\\_details\(\)](#), [combined\\_buyer\\_monthly\(\)](#), [summarized\\_county\\_annual\(\)](#), [summarized\\_county\\_monthly\(\)](#), [total\\_distributors\\_county\(\)](#), [total\\_distributors\\_state\(\)](#), [total\\_manufacturers\\_county\(\)](#), [total\\_manufacturers\\_state\(\)](#), [total\\_pharmacies\\_county\(\)](#), [total\\_pharmacies\\_state\(\)](#)

## Examples

```
library(arcos)

mingo_wv <- combined_buyer_annual(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

combined\_buyer\_monthly

*Get annual total pills for each buyer (pharmacy, etc) in a county*

---

## Description

Get annual total pills for each buyer (pharmacy, etc) in a county

## Usage

```
combined_buyer_monthly(  
  county = "Mingo",  
  state = "WV",  
  year = 2012,  
  key = "WaPo"  
)
```

## Arguments

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
year	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

## See Also

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other summarized: [buyer\\_details\(\)](#), [combined\\_buyer\\_annual\(\)](#), [summarized\\_county\\_annual\(\)](#), [summarized\\_county\\_monthly\(\)](#), [total\\_distributors\\_county\(\)](#), [total\\_distributors\\_state\(\)](#), [total\\_manufacturers\\_county\(\)](#), [total\\_manufacturers\\_state\(\)](#), [total\\_pharmacies\\_county\(\)](#), [total\\_pharmacies\\_state\(\)](#)

## Examples

```
library(arcos)

mingo_wv <- combined_buyer_monthly(county = "Mingo", state="WV", year=2012, key="WaPo")

head(mingo_wv)
```

---

county_list	<i>Get dataframe of counties, states, and fips codes that are represented in the ARCOS data</i>
-------------	---

---

## Description

Get dataframe of counties, states, and fips codes that are represented in the ARCOS data

## Usage

```
county_list(key = "WaPo")
```

## Arguments

key	Key needed to make query successful
-----	-------------------------------------

## See Also

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other raw data: [buyer\\_list\(\)](#), [county\\_raw\\_fips\(\)](#), [county\\_raw\(\)](#), [drug\\_county\\_biz\(\)](#), [drug\\_fips\\_biz\(\)](#), [drug\\_list\(\)](#), [pharmacy\\_raw\(\)](#), [raw\\_data\(\)](#)

## Examples

```
library(arcos)

counties <- county_list(key="WaPo")

head(counties)
```

---

county_population	<i>Get annual population for counties between 2006 and 2014</i>
-------------------	---

---

**Description**

Get annual population for counties between 2006 and 2014

**Usage**

```
county_population(county = "Mingo", state = "WV", key = "WaPo")
```

**Arguments**

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other geocoded data: [buyer\\_addresses\(\)](#), [not\\_pharmacies\(\)](#), [pharm\\_cbsa\(\)](#), [pharm\\_counties\(\)](#), [pharm\\_latlon\(\)](#), [pharm\\_tracts\(\)](#), [reporter\\_addresses\(\)](#), [state\\_population\(\)](#)

**Examples**

```
library(arcos)

mingo_wv <- county_population(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

county_raw	<i>Download raw prescription data for specified county (by state and county names) into R</i>
------------	---

---

**Description**

Data from from non-contiguous states not yet processed and available. This raw data only includes data from pharmacies and practitioners and the drugs Hydrocodne and Oxycodone.

**Usage**

```
county_raw(county = "Mingo", state = "WV", key = "WaPo")
```



**Arguments**

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other raw data: [buyer\\_list\(\)](#), [county\\_list\(\)](#), [county\\_raw\\_fips\(\)](#), [drug\\_county\\_biz\(\)](#), [drug\\_fips\\_biz\(\)](#), [drug\\_list\(\)](#), [pharmacy\\_raw\(\)](#), [raw\\_data\(\)](#)

**Examples**

```
library(arcos)

mingo_wv <- county_raw(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

county_raw_fips	<i>Download raw prescription data for specified county (by county FIPS code) into R</i>
-----------------	---

---

**Description**

Data from from non-contiguous states not yet processed and available. This raw data only includes data from pharmacies and practitioners and the drugs Hydrocodne and Oxycodone.

**Usage**

```
county_raw_fips(fips = "01001", key = "WaPo")
```

**Arguments**

fips	Filter the data to only this county (e.g. '01001' for Autauga, Alabama)
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other raw data: [buyer\\_list\(\)](#), [county\\_list\(\)](#), [county\\_raw\(\)](#), [drug\\_county\\_biz\(\)](#), [drug\\_fips\\_biz\(\)](#), [drug\\_list\(\)](#), [pharmacy\\_raw\(\)](#), [raw\\_data\(\)](#)

**Examples**

```
library(arcos)

autauga_al <- county_raw_fips(fips="01001", key="WaPo")

head(autauga_al)
```

---

drug_county_biz	<i>Download raw prescription data for individual drugs and business type by county into R</i>
-----------------	---

---

**Description**

Data from non-contiguous states not yet processed and available.

**Usage**

```
drug_county_biz(
  drug = "Fentanyl",
  county = "Laurens",
  state = "GA",
  buyer_bus_act = "Chain Retail",
  key = "WaPo"
)
```

**Arguments**

drug	Filter the data to one of 14 available drugs in the database (e.g. 'OXYCODONE')
county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
buyer_bus_act	If provided, filter the data to one of businesses in BUYER_BUS_ACT (e.g. 'CHAIN PHARMACY', 'HOSP/CLINIC')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other raw data: [buyer\\_list\(\)](#), [county\\_list\(\)](#), [county\\_raw\\_fips\(\)](#), [county\\_raw\(\)](#), [drug\\_fips\\_biz\(\)](#), [drug\\_list\(\)](#), [pharmacy\\_raw\(\)](#), [raw\\_data\(\)](#)

**Examples**

```
library(arcos)

bronx <- drug_county_biz(drug="Fentanyl", county = "Laurens", state = "GA",
                        buyer_bus_act = "Chain Retail", key="WaPo")

head(bronx)
```

---

drug_fips_biz	<i>Download raw prescription data for individual drugs and business type by county FIPS code into R</i>
---------------	---

---

**Description**

Data from from non-contiguous states not yet processed and available.

**Usage**

```
drug_fips_biz(
  drug = "Fentanyl",
  fips = "01001",
  buyer_bus_act = "Chain Retail",
  key = "WaPo"
)
```

**Arguments**

drug	Filter the data to one of 14 available drugs in the database (e.g. 'OXYCODONE')
fips	Filter the data to only this county (e.g. '01001' for Autauga, Alabama)
buyer_bus_act	If provided, filter the data to one of businesses in BUYER_BUS_ACT (e.g. 'CHAIN PHARMACY', 'HOSP/CLINIC')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other raw data: [buyer\\_list\(\)](#), [county\\_list\(\)](#), [county\\_raw\\_fips\(\)](#), [county\\_raw\(\)](#), [drug\\_county\\_biz\(\)](#), [drug\\_list\(\)](#), [pharmacy\\_raw\(\)](#), [raw\\_data\(\)](#)

## Examples

```
library(arcos)

autauga_al <- drug_fips_biz(drug="Fentanyl", fips="01001", buyer_bus_act="Chain Retail", key="WaPo")

head(autauga_al)
```

---

drug\_list

*Get list of drugs available in the ARCOS database*

---

## Description

Get list of drugs available in the ARCOS database

## Usage

```
drug_list(key = "WaPo")
```

## Arguments

key                    Key needed to make query successful

## See Also

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other raw data: [buyer\\_list\(\)](#), [county\\_list\(\)](#), [county\\_raw\\_fips\(\)](#), [county\\_raw\(\)](#), [drug\\_county\\_biz\(\)](#), [drug\\_fips\\_biz\(\)](#), [pharmacy\\_raw\(\)](#), [raw\\_data\(\)](#)

## Examples

```
library(arcos)

np <- drug_list(key="WaPo")

np
```

---

not_pharmacies	<i>Get list of misidentified pharmacies by BUYER_DEA_NOs</i>
----------------	--

---

**Description**

Get list of misidentified pharmacies by BUYER\_DEA\_NOs

**Usage**

```
not_pharmacies(key = "WaPo")
```

**Arguments**

key	Key needed to make query successful
-----	-------------------------------------

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other geocoded data: [buyer\\_addresses\(\)](#), [county\\_population\(\)](#), [pharm\\_cbsa\(\)](#), [pharm\\_counties\(\)](#), [pharm\\_latlon\(\)](#), [pharm\\_tracts\(\)](#), [reporter\\_addresses\(\)](#), [state\\_population\(\)](#)

**Examples**

```
library(arcos)

np <- not_pharmacies(key="WaPo")

head(np)
```

---

pharmacy_raw	<i>Download raw prescription data for specified pharmacy (by BUYER_DEA_NO) into R</i>
--------------	---

---

**Description**

Data from non-contiguous states not yet processed and available. This raw data only includes data from pharmacies and practitioners and the drugs Hydrocodone and Oxycodone.

**Usage**

```
pharmacy_raw(buyer_dea_no = "AB0454176", key = "WaPo")
```

**Arguments**

buyer\_dea\_no    Filter the data to only this pharmacy (e.g. 'AB0454176')  
 key            Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other raw data: [buyer\\_list\(\)](#), [county\\_list\(\)](#), [county\\_raw\\_fips\(\)](#), [county\\_raw\(\)](#), [drug\\_county\\_biz\(\)](#), [drug\\_fips\\_biz\(\)](#), [drug\\_list\(\)](#), [raw\\_data\(\)](#)

**Examples**

```
library(arcos)

solo_pharm <- pharmacy_raw(buyer_dea_no="AB0454176", key="WaPo")

head(solo_pharm)
```

---

pharm_cbsa	<i>Get the core-based statistical area GEOID for each pharmacy based on BUYER_DEA_NO (Only includes retail and chain pharmacy designations)</i>
------------	---

---

**Description**

Get the core-based statistical area GEOID for each pharmacy based on BUYER\_DEA\_NO (Only includes retail and chain pharmacy designations)

**Usage**

```
pharm_cbsa(geoid = "26580", county = "Mingo", state = "WV", key = "WaPo")
```

**Arguments**

geoid            Filter the data to only this cbsa GEOD (e.g. '26580')  
 county          If geoid not included, filter the data to only this county (e.g. 'Mingo')  
 state            If geoid not included, filter the data to county within this state (e.g. 'WV')  
 key            Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other geocoded data: [buyer\\_addresses\(\)](#), [county\\_population\(\)](#), [not\\_pharmacies\(\)](#), [pharm\\_counties\(\)](#), [pharm\\_latlon\(\)](#), [pharm\\_tracts\(\)](#), [reporter\\_addresses\(\)](#), [state\\_population\(\)](#)

**Examples**

```
library(arcos)

mingo_wv <- pharm_cbsa(geoid="26580", key="WaPo")

head(mingo_wv)
```

---

pharm_counties	<i>Get county GEOID for each pharmacy based on BUYER_DEA_NO (Only includes retail and chain pharmacy designations)</i>
----------------	--

---

**Description**

Get county GEOID for each pharmacy based on BUYER\_DEA\_NO (Only includes retail and chain pharmacy designations)

**Usage**

```
pharm_counties(county = "Mingo", state = "WV", key = "WaPo")
```

**Arguments**

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other geocoded data: [buyer\\_addresses\(\)](#), [county\\_population\(\)](#), [not\\_pharmacies\(\)](#), [pharm\\_cbsa\(\)](#), [pharm\\_latlon\(\)](#), [pharm\\_tracts\(\)](#), [reporter\\_addresses\(\)](#), [state\\_population\(\)](#)

**Examples**

```
library(arcos)

mingo_wv <- pharm_counties(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

pharm_latlon	<i>Get latitude and longitude data for each pharmacy based on BUYER_DEA_NO (Only includes retail and chain pharmacy designations)</i>
--------------	---

---

### Description

Get latitude and longitude data for each pharmacy based on BUYER\_DEA\_NO (Only includes retail and chain pharmacy designations)

### Usage

```
pharm_latlon(county = "Mingo", state = "WV", key = "WaPo")
```

### Arguments

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

### See Also

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other geocoded data: [buyer\\_addresses\(\)](#), [county\\_population\(\)](#), [not\\_pharmacies\(\)](#), [pharm\\_cbsa\(\)](#), [pharm\\_counties\(\)](#), [pharm\\_tracts\(\)](#), [reporter\\_addresses\(\)](#), [state\\_population\(\)](#)

### Examples

```
library(arcos)

mingo_wv <- pharm_latlon(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

pharm_tracts	<i>Get census tract GEOID for each pharmacy based on BUYER_DEA_NO (Only includes retail and chain pharmacy designations)</i>
--------------	--

---

### Description

Get census tract GEOID for each pharmacy based on BUYER\_DEA\_NO (Only includes retail and chain pharmacy designations)



**Usage**

```
pharm_tracts(county = "Mingo", state = "WV", key = "WaPo")
```

**Arguments**

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other geocoded data: [buyer\\_addresses\(\)](#), [county\\_population\(\)](#), [not\\_pharmacies\(\)](#), [pharm\\_cbsa\(\)](#), [pharm\\_counties\(\)](#), [pharm\\_latlon\(\)](#), [reporter\\_addresses\(\)](#), [state\\_population\(\)](#)

**Examples**

```
library(arcos)

mingo_wv <- pharm_tracts(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

raw_data	<i>Raw ARCOS data (Warning 130+ GB file) Warning: May not fit on your memory.. If interested in the raw data, you can download via the link below.</i>
----------	--

---

**Description**

Raw ARCOS data (Warning 130+ GB file) Warning: May not fit on your memory.. If interested in the raw data, you can download via the link below.

**Usage**

```
raw_data(key = "WaPo")
```

**Arguments**

key	Key needed to make query successful
-----	-------------------------------------

**See Also**

[https://d2ty8gaf6rmowa.cloudfront.net/dea-pain-pill-database/bulk/arcos\\_all\\_washpost.tsv.gz](https://d2ty8gaf6rmowa.cloudfront.net/dea-pain-pill-database/bulk/arcos_all_washpost.tsv.gz)

Other raw data: [buyer\\_list\(\)](#), [county\\_list\(\)](#), [county\\_raw\\_fips\(\)](#), [county\\_raw\(\)](#), [drug\\_county\\_biz\(\)](#), [drug\\_fips\\_biz\(\)](#), [drug\\_list\(\)](#), [pharmacy\\_raw\(\)](#)

---

reporter_addresses	<i>Get DEA designated addresses for each Reporter based on REPORTER_DEA_NO (Includes Manufacturers and Distributors)</i>
--------------------	--

---

**Description**

Get DEA designated addresses for each Reporter based on REPORTER\_DEA\_NO (Includes Manufacturers and Distributors)

**Usage**

```
reporter_addresses(county = "Mingo", state = "WV", key = "WaPo")
```

**Arguments**

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other geocoded data: [buyer\\_addresses\(\)](#), [county\\_population\(\)](#), [not\\_pharmacies\(\)](#), [pharm\\_cbsa\(\)](#), [pharm\\_counties\(\)](#), [pharm\\_latlon\(\)](#), [pharm\\_tracts\(\)](#), [state\\_population\(\)](#)

**Examples**

```
library(arcos)

mingo_wv <- reporter_addresses(county = "Harris", state="TX", key="WaPo")

head(mingo_wv)
```

---

state_population	<i>Get annual population for states between 2006 and 2014</i>
------------------	---

---

**Description**

Get annual population for states between 2006 and 2014

**Usage**

```
state_population(state = "WV", key = "WaPo")
```

**Arguments**

state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other geocoded data: [buyer\\_addresses\(\)](#), [county\\_population\(\)](#), [not\\_pharmacies\(\)](#), [pharm\\_cbsa\(\)](#), [pharm\\_counties\(\)](#), [pharm\\_latlon\(\)](#), [pharm\\_tracts\(\)](#), [reporter\\_addresses\(\)](#)

**Examples**

```
library(arcos)

wv <- state_population(state="WV", key="WaPo")

head(wv)
```

---

summarized_county_annual	<i>Get annual summarized pill totals by county</i>
--------------------------	--

---

**Description**

Get annual summarized pill totals by county

**Usage**

```
summarized_county_annual(county = "Mingo", state = "WV", key = "WaPo")
```

**Arguments**

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other summarized: `buyer_details()`, `combined_buyer_annual()`, `combined_buyer_monthly()`, `summarized_county_monthly()`, `total_distributors_county()`, `total_distributors_state()`, `total_manufacturers_county()`, `total_manufacturers_state()`, `total_pharmacies_county()`, `total_pharmacies_state()`

**Examples**

```
library(arcos)

mingo_wv <- summarized_county_annual(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

summarized\_county\_monthly

*Get monthly summarized pill totals by county*

---

**Description**

Get monthly summarized pill totals by county

**Usage**

```
summarized_county_monthly(county = "Mingo", state = "WV", key = "WaPo")
```

**Arguments**

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other summarized: `buyer_details()`, `combined_buyer_annual()`, `combined_buyer_monthly()`, `summarized_county_annual()`, `total_distributors_county()`, `total_distributors_state()`, `total_manufacturers_county()`, `total_manufacturers_state()`, `total_pharmacies_county()`, `total_pharmacies_state()`

**Examples**

```
library(arcos)

mingo_wv <- summarized_county_monthly(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

total\_distributors\_county

*Get total pills for each distributor in a county*

---

**Description**

Get total pills for each distributor in a county

**Usage**

```
total_distributors_county(county = "Mingo", state = "WV", key = "WaPo")
```

**Arguments**

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other summarized: `buyer_details()`, `combined_buyer_annual()`, `combined_buyer_monthly()`, `summarized_county_annual()`, `summarized_county_monthly()`, `total_distributors_state()`, `total_manufacturers_county()`, `total_manufacturers_state()`, `total_pharmacies_county()`, `total_pharmacies_state()`

## Examples

```
library(arcos)

mingo_wv <- total_distributors_county(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

total\_distributors\_state

*Get total pills for each distributor in a state*

---

## Description

Get total pills for each distributor in a state

## Usage

```
total_distributors_state(state = "WV", key = "WaPo")
```

## Arguments

state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

## See Also

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other summarized: [buyer\\_details\(\)](#), [combined\\_buyer\\_annual\(\)](#), [combined\\_buyer\\_monthly\(\)](#), [summarized\\_county\\_annual\(\)](#), [summarized\\_county\\_monthly\(\)](#), [total\\_distributors\\_county\(\)](#), [total\\_manufacturers\\_county\(\)](#), [total\\_manufacturers\\_state\(\)](#), [total\\_pharmacies\\_county\(\)](#), [total\\_pharmacies\\_state\(\)](#)

## Examples

```
library(arcos)

wv <- total_distributors_state(state="WV", key="WaPo")

head(wv)
```

---

`total_manufacturers_county`*Get total pills for each manufacturer in a county*

---

**Description**

Get total pills for each manufacturer in a county

**Usage**

```
total_manufacturers_county(county = "Mingo", state = "WV", key = "WaPo")
```

**Arguments**

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other summarized: `buyer_details()`, `combined_buyer_annual()`, `combined_buyer_monthly()`, `summarized_county_annual()`, `summarized_county_monthly()`, `total_distributors_county()`, `total_distributors_state()`, `total_manufacturers_state()`, `total_pharmacies_county()`, `total_pharmacies_state()`

**Examples**

```
library(arcos)

mingo_wv <- total_manufacturers_county(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

total\_manufacturers\_state

*Get total pills for each manufacturer in a state*

---

### Description

Get total pills for each manufacturer in a state

### Usage

```
total_manufacturers_state(state = "WV", key = "WaPo")
```

### Arguments

state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

### See Also

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other summarized: [buyer\\_details\(\)](#), [combined\\_buyer\\_annual\(\)](#), [combined\\_buyer\\_monthly\(\)](#), [summarized\\_county\\_annual\(\)](#), [summarized\\_county\\_monthly\(\)](#), [total\\_distributors\\_county\(\)](#), [total\\_distributors\\_state\(\)](#), [total\\_manufacturers\\_county\(\)](#), [total\\_pharmacies\\_county\(\)](#), [total\\_pharmacies\\_state\(\)](#)

### Examples

```
library(arcos)

wv <- total_manufacturers_state(state="WV", key="WaPo")

head(wv)
```

---

total\_pharmacies\_county

*Get total pills for each pharmacy in a county*

---

### Description

Get total pills for each pharmacy in a county



**Usage**

```
total_pharmacies_county(county = "Mingo", state = "WV", key = "WaPo")
```

**Arguments**

county	Filter the data to only this county (e.g. 'Mingo')
state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other summarized: [buyer\\_details\(\)](#), [combined\\_buyer\\_annual\(\)](#), [combined\\_buyer\\_monthly\(\)](#), [summarized\\_county\\_annual\(\)](#), [summarized\\_county\\_monthly\(\)](#), [total\\_distributors\\_county\(\)](#), [total\\_distributors\\_state\(\)](#), [total\\_manufacturers\\_county\(\)](#), [total\\_manufacturers\\_state\(\)](#), [total\\_pharmacies\\_state\(\)](#)

**Examples**

```
library(arcos)

mingo_wv <- total_pharmacies_county(county = "Mingo", state="WV", key="WaPo")

head(mingo_wv)
```

---

total\_pharmacies\_state

*Get total pills for each pharmacy in a state*

---

**Description**

Get total pills for each pharmacy in a state

**Usage**

```
total_pharmacies_state(state = "WV", key = "WaPo")
```

**Arguments**

state	Filter the data to county within this state (e.g. 'WV')
key	Key needed to make query successful

**See Also**

<https://www.washingtonpost.com/graphics/2019/investigations/dea-pain-pill-database/#download-resources>

Other summarized: `buyer_details()`, `combined_buyer_annual()`, `combined_buyer_monthly()`, `summarized_county_annual()`, `summarized_county_monthly()`, `total_distributors_county()`, `total_distributors_state()`, `total_manufacturers_county()`, `total_manufacturers_state()`, `total_pharmacies_county()`

**Examples**

```
library(arcos)
```

```
wv <- total_pharmacies_state(state="WV", key="WaPo")
```

```
head(wv)
```

# Index

- \* **geocoded data**
  - buyer\_addresses, 3
  - county\_population, 8
  - not\_pharmacies, 13
  - pharm\_cbsa, 14
  - pharm\_counties, 15
  - pharm\_latlon, 16
  - pharm\_tracts, 16
  - reporter\_addresses, 18
  - state\_population, 19
- \* **raw data**
  - buyer\_list, 4
  - county\_list, 7
  - county\_raw, 8
  - county\_raw\_fips, 9
  - drug\_county\_biz, 10
  - drug\_fips\_biz, 11
  - drug\_list, 12
  - pharmacy\_raw, 13
  - raw\_data, 17
- \* **summarized**
  - buyer\_details, 4
  - combined\_buyer\_annual, 5
  - combined\_buyer\_monthly, 6
  - summarized\_county\_annual, 19
  - summarized\_county\_monthly, 20
  - total\_distributors\_county, 21
  - total\_distributors\_state, 22
  - total\_manufacturers\_county, 23
  - total\_manufacturers\_state, 24
  - total\_pharmacies\_county, 24
  - total\_pharmacies\_state, 25
- arcos, 2
- buyer\_addresses, 3, 8, 13–19
- buyer\_details, 4, 5, 6, 20–26
- buyer\_list, 4, 7, 9–12, 14, 18
- combined\_buyer\_annual, 4, 5, 6, 20–26
- combined\_buyer\_monthly, 4, 5, 6, 20–26
- county\_list, 5, 7, 9–12, 14, 18
- county\_population, 3, 8, 13–19
- county\_raw, 5, 7, 8, 9–12, 14, 18
- county\_raw\_fips, 5, 7, 9, 9, 10–12, 14, 18
- drug\_county\_biz, 5, 7, 9, 10, 11, 12, 14, 18
- drug\_fips\_biz, 5, 7, 9, 10, 11, 12, 14, 18
- drug\_list, 5, 7, 9–11, 12, 14, 18
- not\_pharmacies, 3, 8, 13, 14–19
- pharm\_cbsa, 3, 8, 13, 14, 15–19
- pharm\_counties, 3, 8, 13, 14, 15, 16–19
- pharm\_latlon, 3, 8, 13–15, 16, 17–19
- pharm\_tracts, 3, 8, 13–16, 16, 18, 19
- pharmacy\_raw, 5, 7, 9–12, 13, 18
- raw\_data, 5, 7, 9–12, 14, 17
- reporter\_addresses, 3, 8, 13–17, 18, 19
- state\_population, 3, 8, 13–18, 19
- summarized\_county\_annual, 4–6, 19, 21–26
- summarized\_county\_monthly, 4–6, 20, 20, 21–26
- total\_distributors\_county, 4–6, 20, 21, 21, 22–26
- total\_distributors\_state, 4–6, 20, 21, 22, 23–26
- total\_manufacturers\_county, 4–6, 20–22, 23, 24–26
- total\_manufacturers\_state, 4–6, 20–23, 24, 25, 26
- total\_pharmacies\_county, 4–6, 20–24, 24, 26
- total\_pharmacies\_state, 4–6, 20–25, 25