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## Multiples Counties per ZIP Documentation

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### Multi-County ZIPs

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#### Introduction:

ZIP Codes cross multiple counties over 20% of the time. If you need to know the correct county, our Multi-County ZIPs product can help. It will list multiple records with a percentage of the county that covers that ZIP Code, as far as we can determine.

This product is ideal when you are entering addresses and need to know the county. You can write the address entry program to select the correct county from a drop-down list. This works well when you are talking to the person whose address you are keying in.

If you are not talking to the person and don't know which is the correct county, but you have the address, you should look at our **Multi-County Max** product. This product can help you find the correct county based on the ZIP+4 (9-digit ZIP Code).

We create our Multi-County ZIPs product by aggregating about 45 million ZIP+ 4 address records. **We discard erroneous and extraneous records that are found in the raw data.** For instance, recently a client compared a ZIP Code that we had showing in 2 counties with our competitors. The competition showed it in 3 counties, which, on the surface, would make our data appear incorrect. We looked at the raw data and found that there were 2 records out of over 1,600 records with the third county. We looked at multiple maps to verify and found that the 2 records were clearly in the wrong ZIP Code. Our product was accurate!

#### A Major Product Improvement:

In September of 2012, we released a new version of this product that is greatly improved over other competitive products. We found that the U.S. Postal Service counties were often incorrect. We used mapping and other technologies to determine where the USPS data is wrong and created our own override tables. We found and fixed the following USPS errors:

- The wrong county assigned to a ZIP. All ZIP+4 records had the wrong county.
- Missing counties per ZIP.
- Multiple counties were assigned, but the ZIP Code was entirely in one county.
- The percentages that the USPS had were way off.

Our sample data has the first 1,000 records of our file. Some ZIP Codes that were wrong that you can see in our demo include: 00617, 00650, 00670, 00685, 00745, 00969, 01050, 01366, and 02467.

## Data File Names:

The main file is **mcz.csv** (mcz-demo.csv is the demo version). We also include a state master file, **states.csv**.

## Sample Data:

This is a sample of the data in mcz.csv:

Zip Code	Sequence	State	City	County	StateFIPS	CountyFIPS	Percent
01011	1	MA	Chester	Hampden	25	013	72
01011	2	MA	Chester	Hampshire	25	015	25
01011	3	MA	Chester	Berkshire	25	003	3

## File Layout:

The mcz.csv file has a header record followed by detail records. The field layout is as follows:

1. A 5-digit **Zip Code** is the first field.
2. A **Sequence Number** is next. The record with the largest percentage is sequence #1.
3. The **State Abbreviation** is next and is 2 characters long.
4. The **City** is next and is up to 30 characters.
5. The **County** follows the city and is up to 30 characters.
6. A 2-digit **State FIPS Code** is next. This is a standard code assigned by the government.
7. A 3-digit **County FIPS Code** follows and is a number assigned to every county.
8. The **Percentage** of the ZIP Code which this county covers is next.

The **States file (states.csv)** has a header record followed by detail records. The detail records are sorted by the State Abbreviation. The field layout is as follows:

1. The **State / Province Abbreviation** is the first field and is 2 characters long.
2. The **State / Province Name** is next. It could be up to 50 characters long.
3. The 3-character **Country Abbreviation** is next ('USA' for American states, or 'CAN' for Canadian provinces).

**County.csv file layout:**

We also provide a County master file (county.csv). It has all states and territories. These are the following fields:

- State FIPS. This is a standard number for the state.
- County FIPS. The standard number for the county within the state.
- State Abbreviation.
- County Name.
- County Type. This includes the following variables:
  - Borough
  - Census Area
  - City
  - County
  - District
  - Municipio (for Puerto Rico)
  - Parish (Louisiana)
  - Territory