ZIPList5 Max User's Guide

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OVERVIEW

ZIPList5 Max is a database of every active ZIP code in the United States and its territories to which the US Postal Service delivers mail. The database contains the city name and other data for each of the nearly 42,000 active ZIP codes defined by the USPS. Additionally, the database also includes approximately 29,000 "alias" city name records, for a total of approximately 71,000 records.

The data in this database was compiled by CD Light from a variety of sources, including the US Postal Service, maps, and NANPA. We obtain a new list of ZIP codes and city names each month under license directly from the USPS. ZIPList5 Max is accurate and up-to-date at the time of its release.

Because this database is a simple text file, it can be used on almost every type of computer, including PCs and compatibles, Macintoshes, and UNIX workstations.

The database is formatted as a comma delimited ASCII text file, making it easy to import the data into most database programs or spreadsheet programs, such as MS Access or Excel. The text file can also be searched by most text editors programs.

Caution: not all of the city names in this database are approved by the US Postal Service for use for mail delivery. City names with the “Preferred?” flag set to "N" are alias city names which are not approved for mail delivery to the associated ZIP code. Note that a particular city name may be approved for delivery to some ZIP codes and not others.

END-USER LICENSE

Please read the accompanying license document, Z5MAXLIC.TXT, which defines your rights and restrictions for using ZIPList5 Max. Your license level is indicated on the invoice for ZIPList5 Max issued to you by CD Light.

INSTALLATION

ZIPList5 Max is available on CDROM and can also be downloaded from our secure database server. The data content is the same in either case. You should select the proper installation notes below depending upon the the distribution medium you selected at the time you placed your order.

INSTALLATION AFTER DOWNLOADING VIA THE INTERNET

ZIPList5 Max is available to download from our secure database server in a variety of different formats. Each file contains the exact same data, but the data has been formatted for a specific desktop database program. You should download the proper format for your database program. You can download more than one format, if you wish, and you can download the data as often as you need to. There is no charge for downloading the data more than once.

Most files on our database server have been compressed for faster downloading. These files must be decompressed before you can use them with your database program. To make the decompression easier, most of the files have been made "self-extracting", which means that you do not need to use a specific program to decompress the files - they decompress themselves!

To install ZIPList5 Max after downloading, follow these steps:

1. Download the format of your choice from the secure database server. Be sure to save the file to your hard drive, and note the name of the file and the folder where it has been saved.

2. If the file name ends in ".exe", such as Z5max.exe, the file is a "self-extracting" compressed file. To decompress the file you must "run" the file as a program so that it can decompress itself. Just double-click on the file name using Windows Explorer. The file will extract itself from the compressed form to its original format and name. Hint: Windows Explorer may not show the file extensions, depending upon settings in the View | Options menu.

3. The actual database file name depends upon the format of the data:

File Name	Format
Z5max.txt	Comma-delimited ASCII (also known as CSV)
Z5maxA2K.mdb	MS Access 2000
Z5maxA03.mdb	MS Access 2003
Z5maxA07.accdb	MS Access 2007
Z5maxX07.xlsx	MS Excel 2007
Z5max.dbf	dBase/FoxPro
Z5max.db	Paradox

4. Open the file using the database program of your choice.

INSTALLATION from CDROM

ZIPList5 Max is available on the CDROM in a variety of different formats. Each file contains the exact same data, but the data has been formatted for a specific desktop database program. This means that all you need to do is select the proper format for your database program and simply copy the file containing that format from the CDROM to the proper folder on your computer. The files on the CDROM are not compressed.

To install this database from a CDROM, follow these steps:

1. Identify the file which has the data in the format you wish to use. The following table identifies the various formats available on the CDROM for this database:

File Name	Format
Z5max.txt	Comma-delimited ASCII (also known as CSV)
Z5maxA2K.mdb	MS Access 2000
Z5maxA03.mdb	MS Access 2003
Z5maxA07.accdb	MS Access 2007
Z5maxX07.xlsx	MS Excel 2007
Z5max.dbf	dBase/FoxPro
Z5max.db	Paradox

2. Using Windows Explorer, copy the file in the format of your choice from the CDROM to the desired folder on your computer.

3. Open the file using the database program of your choice.

SUPPORT FILES

ZIPList5 Max contains several support and cross-walk files which you may find useful. These files can be found on the CDROM or in the folder where the compressed archive was decompressed. Here are the files you should find:

FILE	CONTENT
Z5maxdoc.pdf	ZIPList5 Max documentation file (this file)
Z5maxlic.pdf	ZIPList5 Max license file
ReleaseNotes.txt	List of recent ZIP code changes
ac.txt	List of area codes for North America, including overlays
stfips.txt	List of state FIPS codes and state abbreviations
malist.csv	List of Market Areas in CSV format
malist.tx	List of Market Areas in tabular format
msapmsa.txt	List of MSAs, PMSAs, and CMSAs in tabular format
msapmsa.csv	List of MSAs, PMSAs, and CMSAs in CSV format
msadoc.txt	Information about MSAs, PMSAs, and CMSAs
CBSAList2013.txt	List of CBSAs, Divisions, and CSAs in tabular format (ANSI)
CBSAList2013.csv	List of CBSAs, Divisions, and CSAs in CSV format (ANSI)
CBSAList2013_oem.txt	List of CBSAs, Divisions, and CSAs in tabular format (ASCII)
CBSAList2013_oem.csv	List of CBSAs, Divisions, and CSAs in CSV format (ASCII)
CBSA_Definition_2010.pdf	Information about CBSAs, Divisions, and CSAs

RECORD LAYOUT

The data records of the ZIPList5 Max file consist of nineteen quote-delimited, comma-separated, ASCII text fields, arranged as follows:

FIELD	TYPE	LENGTH
City Name	Variable length	ASCII 28 maximum
State Code	Fixed length ASCII	2 alpha characters
ZIP code	Fixed length ASCII	5 numeric characters
Area code	Fixed length ASCII	3 numeric characters
County FIPS	Fixed length ASCII	5 numeric characters
County Name	Variable length ASCII	25 alphabetic characters max
Preferred?	Fixed length ASCII	1 character: "P","A", or "N"
Time zone	Variable length ASCII	5 maximum (see below)
DST?	Fixed length ASCII	1 character: "Y" or "N"
Latitude	Fixed length ASCII	7 or 8 chars: nn.nnnn
Longitude	Variable length ASCII	8 or 9 chars: nnn.nnnn
MSA	Fixed length ASCII	4 numeric chars or blank
PMSA	Fixed length ASCII	4 numeric chars or blank
City abbreviation	Variable length ASCII	13 alphabetic characters max
Market Area	Fixed length ASCII	3 numeric chars or blank
ZIP code type	Fixed length ASCII	1 char (P, U, M, or blank)
CBSA	Fixed length	5 numeric characters or blank
Division	Fixed length	5 numeric characters or blank
Population	Variable length	10 numeric characters max

DATA FIELD DESCRIPTIONS

City Name

The City Name field contains a city name associated with the ZIP code by the USPS. There may be several different city names associated with a particular ZIP code. If so, the ZIP code will appear in several different records, each with a different city name. You can use the “Preferred?” field (described below) to identify the one city name which is the actual city name, as defined by the USPS, for that ZIP code.

State Code

The state field contains the two-character alpha abbreviation for the state, as defined by the USPS, such as “CA” for California.

ZIP Code

The ZIP code field lists only valid 5-digit ZIP codes currently defined by the USPS. Obsolete ZIP codes which have been "retired" from service by the USPS are not included in this database.

A particular ZIP code may appear in more than one record if the USPS has defined more than one city name for that ZIP code. If you wish to eliminate the "duplicate" ZIP code records, you can use the Preferred? field (described below) to isolate those records which contain the city names "preferred" by the USPS for mail delivery. There should be exactly one such record for each of the approximately 43,000 active ZIP codes.

The ZIP code field is treated as a text field, not a numeric field. This is to prevent the loss of the leading zeroes in certain ZIP codes when the data is imported into a database program. The area code, County FIPS, Latitude, Longitude, MSA, and PMSA fields are also treated as text fields. Treating all fields as text fields simplifies the importing and exporting of the data using a database program.

Area Code

The area code is the "most prevalent" area code for that one ZIP code. If multiple area codes apply to that one ZIP code, only the primary area code is listed. Overlay area codes are not listed in ZIPList5 Max. See support file ac.txt for a full list of all active area codes, including overlay area codes, in North America.

County FIPS and County Name

The County FIPS code field and the County Name field identify the one county that contains the largest portion of the ZIP code, even if the ZIP code lies in two or more counties. Please note that

ZIP codes often cross county boundaries. Some ZIP codes actually cross the state line into an adjacent state!

ZIPList5 lists only one county for a given ZIP code no matter how many counties the ZIP code may lie in. Our County-ZIP Code Database lists every county and ZIP code combination, which is useful if you need to know every ZIP code which lies within a particular county or all counties which include a portion of a particular ZIP code. If you wish to resolve an address to an exact county, please be aware that you cannot determine the correct county with 100 percent accuracy using the 5-digit ZIP code alone. For this you must use a different product, such as our Perfect Address Windows program, which uses the full street address to determine the correct county.

Please note that the specified county in a record is related to the ZIP code, but not necessarily to the city name specified in that record. It is quite possible that some or all of the specified city may actually lie in a different county than the ZIP code (see discussion below).

The County FIPS code is a 5-digit numeric field containing a unique numeric identification assigned to each county by the US government. The county FIPS code is actually a 3-digit code, but most people prefer to combine the 2-digit state FIPS code with the 3-digit county FIPS code to yield a 5-digit code which can be used to uniquely identify each county in the USA. If you do not wish to use the county FIPS code in this way, contact CD Light to obtain a copy of ZIPList5 with the 3-digit form of the county FIPS code. ZIPList5 includes a separate text file, stfips.txt, which defines the state FIPS codes for all 50 states plus the territories.

Preferred City Name

The “Preferred?” field indicates whether the city name contained in the record can be used for delivery of mail to the associated ZIP code. This field contains a single ASCII character which indicates:

P This record contains the actual (preferred) city name for this ZIP code.
A The city name in this record is approved for use with this ZIP code.
N This city name in this record is not approved for mail delivery to this ZIP code.

For every ZIP code in the database there is one and only one record in the database in which the Preferred? field is set to "P". This record contains the one “actual”city name preferred by the US Postal Service for use on all mail sent to that particular ZIP code.

In addition to the record marked "P", there may be one or more additional records with the same ZIP code in which the Preferred? field is set to either "A" or "N". A record marked "A" contains an alternate city name which may be used for mail delivery to that ZIP code.

A record marked "N" contains an alias city name which is not approved by the US Postal Service for mail delivery purposes to that one ZIP code. An alias city name which is not approved for

mail delivery should be changed to the actual city name for that same ZIP code. Note that a given city name may be preferred for some ZIP codes and approved or not approved for other ZIP codes.

We have included the approved and unapproved city names along with the actual city names because people across the country routinely use the alias city names in their addresses, even though the alias city names are approved by the US Postal Service for mail delivery. You can use these non-preferred city names to verify an address and/or ZIP code, and then correct the city name to the actual city name, if you wish. Using the actual city name for all addresses in your database helps find and eliminate duplicate addresses in your database.

Note that in some cases a particular city name may be preferred for some ZIP codes but an alias name (approved or not approved) for other ZIP codes. This frequently occurs when the exact political boundary between adjacent cities is poorly defined, leading people to use the two city names interchangeably within the boundary area.

Here is an example:

ZIP CODE	Preferred City Name	Alias City Name
80014	Aurora	Denver (not approved)
80220	Denver	Aurora (not approved)
80215	Lakewood	Denver (approved}
80202	Denver	(None)

ZIP codes 80014 and 80220 fall into the boundary area between the adjacent cities of Denver and Aurora, Colorado. Because the actual political boundary between these two cities is not clearly defined (at least in the minds of many people), people often get confused about the correct city name to use within this boundary area. Although Denver is listed in the database as an alias city name for ZIP code 80014, the USPS wants the name Denver to be changed to Aurora. Denver is "not approved" by the USPS for use as the city name for mail addressed to ZIP code 80014. Likewise, Aurora is listed in the database as not approved for mail addressed to ZIP code 80220. The USPS wants Aurora to be changed to Denver for this particular ZIP code.

However, for mail addressed to 80215, for which Lakewood is the preferred city name, Denver is an approved city name. For mail addressed to ZIP code 80215 the USPS says Denver can be used as the city name, even though Lakewood is the preferred city name. So in this case it really doesn't matter to the USPS which city name you use on mail addressed to this particular ZIP code. Go figure.

For ZIP code 80202 Denver is the preferred city name. For this ZIP code there is no alias city name listed in the database. Denver, therefore, is an example of a city name which is preferred

for 80202 and 80220, approved for 80215, and not approved for 80014. And you thought ZIP codes are so simple!

Time Zone

The time zone field always contains the standard time zone designation for a particular ZIP code. If that ZIP code falls within a political entity which participates in Daylight Saving Time (DST) during the summer months, the DST? field is set to "Y". Otherwise the DST? field is set to "N". Note that most (but not all) of Arizona, parts of Indiana, and all of Hawaii, Puerto Rico, and Guam DO NOT switch to DST.

The following codes may be found in the time zone field:

Zone Code	GMT Offset	Geographic Area
EST	GMT-5	Eastern standard time
CST	GMT-6	Central standard time
MST	GMT-7	Mountain standard time
PST	GMT-8	Pacific standard time
EST+1	GMT-4	Puerto Rico, Virgin Islands, APO/FPO (Central America)
GMT+1	GMT+1	APO/FPO (Central Europe)
PST-1	GMT-9	Alaska (except Aleutian Islands)
PST-2	GMT-10	Hawaii, Aleutian Islands
PST-3	GMT-11	Pago Pago
PST-4	GMT+12	Marshall Islands, Wake Island
PST-5	GMT+11	Micronesia
PST-6	GMT+10	Guam
PST-7	GMT+9	APO/FPO (Pacific)

Note that if GMT plus the time zone offset exceeds 23, the current date must be increased by one.

Three small eastern Alabama towns, Linett, Valley, and Phonix City, on the Alabama-Georgia border, observe eastern time, by local custom, instead of central time. However, the US Department of Transportation, which is responsible under federal law for regulating time zone boundaries, does not recognize these towns as being within the eastern time zone. Accordingly, we do not show the associated ZIP codes as being in the eastern time zone. However, you may wish to note this exception in your use of the time zone data in this database.

The ZIP codes affected by this are:

36854	Valley, AL
36863	Lanett, AL
36867	Phenix City, AL
36868	Phenix City, AL
36869	Phenix City, AL
36870	Phenix City, AL
36872	Valley, AL

Likewise, the towns of Jackpot, Mountain City, and Owyhee, Nevada, in the northeastern corner of Nevada near the Idaho border, observe mountain time, by local custom, instead of pacific time. The correct time zone for all of Nevada is pacific time, which is what we show for the ZIP codes associated with these towns. The ZIP codes affected by this are:

89825	Jackpot, NV
89831	Mountain City, NV
89832	Owyhee, NV

Latitude and Longitude

The latitude and longitude fields contain the geographic coordinates in degrees of the "centroid" of the ZIP code area. Depending upon the shape of the ZIP code area, the centroid may actually lie outside of the ZIP code's boundaries.

You may notice that some groups of ZIP codes in this database have identical latitude and longitude values. You might think that this is an error in the database. But the fact is that some ZIP codes are "point" ZIP codes, having no geographic delivery area. ZIP codes which are assigned to post office boxes only and ZIP codes which are assigned to a single company or organization are point ZIP codes. For point ZIP codes we provide the latitude and longitude of the post office which delivers mail to these ZIP codes. Since many point ZIP codes are served by the same post office, you may find many ZIP codes for some cities with identical latitude and longitude values. This same situation also applies to ZIP codes which have been allocated by the USPS but as yet have no assigned street addresses.

The ZIPList5 Max latitude and longitude values are based on the "North American Datum 1983" (NAD-83). Please note that this is a different geodetic "datum" from that used by GPS. GPS works in "World Geodetic System 1984". However, most GPS units can be programmed to display latitude and longitude in NAD-83 coordinates.

MSA (Metropolitan Statistical Area)

The MSA field contains the Metropolitan Statistical Area code, if any, in which the ZIP code lies. The MSA is assigned by the US Government. See the file msapmsa.txt (included with ZIPList5 Max) for a complete list of all valid MSA codes.

PMSA (Primary Metropolitan Statistical Area)

The PMSA field contains the Primary Metropolitan Statistical Area code, if any, in which the ZIP code lies. The PMSA is assigned by the US Government. See the file msapmsa.txt (included with ZIPList5 Max) for a complete list of all valid PMSA codes.

City Name Abbreviation

The city abbreviation field contains the official USPS city abbreviation for most city names which exceed 13 characters. The abbreviation is limited to a maximum of 13 characters.

Market Area

The Market Area field contains the Market Area code, if any, in which the ZIP code lies. The Market Area is a 3-digit code assigned by CD Light. See the file malist.txt (included with ZIPList5 Max) for a complete list of all valid market area codes.

ZIP Code Type

The ZIP code type field identifies special kinds of ZIP codes. For normal residential ZIP codes (which MAY include PO Boxes) this field is blank. The following codes may appear in this field:

P	ZIP code applies only to PO Boxes
M	Military ZIP code (APO/FPO)
U	"Unique" ZIP code assigned to a particular business or organization

CBSA (Core Based Statistical Area)

The CBSA field contains the Metropolitan Statistical Area code or Micropolitan Statistical Area code, if any, in which some or all of the ZIP code lies. Note that rural ZIP codes (ZIP codes that are not part of any metropolitan or micropolitan area) do not have a CBSA code.

The CBSA is a 5-digit FIPS code assigned by the White House's Office of Management and Budget. ZIPList5 MAX includes a cross-walk file listing all valid metropolitan statistical areas and micropolitan statistical areas and their CBSA codes.

Division

The Division field contains the Metropolitan Division code, if any, in which some or all of the ZIP code lies. The Metropolitan Division is a 5-digit FIPS code assigned by the White House's Office of Management and Budget. ZIPList5 Max includes a cross-reference file listing all valid Metropolitan Division codes.

Population

The Population field contains the Census 2012 population estimate for the ZIP code, not for the city. Point ZIP codes (PO Box and unique ZIP codes) have no population numbers.

IMPORTING INTO A DATABASE PROGRAM

You may wish to import the Z5Max.TXT data file into a database program where you will be able to search the data more efficiently and sort the data into an order which better suites your needs. Z5Max.TXT can be used with almost any commercial database program, such as Microsoft ACCESS, Paradox, dBase, FoxPro, or a spreadsheet program such as MS Excel, etc.

To import ZIPList5 Max into a database program:

1. Start your database program in the usual way.

2. Select "IMPORT" from one of the menus.

3. Select the file to import: Z5Max.TXT

4. If necessary, specify the import data format. Any of the following terms may be used to describe the text format of the Z5Max.TXT file:

   delimited text
   delimited ASCII
   comma delimited ASCII
   ASCII (DOS) text

After importing the data, save the converted data in the native format of the database program. You should now be able to sort and search the data using the normal sort and search functions of the database program.

You may wish to build an index for the database. Using an index may shorten searches of the data by your database program. Note, however, that some database programs cannot create an index for a data field which is not unique. The data fields of Z5Max.TXT are not unique, since the same data can (and often does) appear in more than one record of the file.

SEARCHING Z5MAX.TXT USING A TEXT EDITOR

Many text editors can work directly with Z5Max.TXT. Just open the file and use the normal search commands to find a particular city, county, area code, or ZIP code. However, some text editors, such as Windows Notepad, cannot process a file as large as ZIPList5 Max.

SEARCHING USING A WORD PROCESSOR

Many word processing programs can import a text file and search it using the normal search commands. If you must specify the import file format, choose something like this: "ASCII (DOS) TEXT".

WHY ZIP CODES ARE NOT UNIQUE

The ZIPList5 Max ZIP code field is not unique (duplicates exist within the database). The reason for this is that the database contains common local (alias) names for many cities. Such a name is an alternate name by which that city (or some part of that city) is known to local people.
Some people object to using the "preferred" name specified by the US Postal Service; these people may instead use some other, locally preferred name. This can be quite confusing. Accordingly, we have included in the database these "alias" city names, along with the ZIP codes to which they apply. This means that a particular ZIP code may exist in a "preferred name" record and again in one or more "alias name" records.

The one preferred name record has the “Preferred?” field set to "P", while all alias name records have the “Prferred?” field set to "A" or "N". Note that in some cases a particular name may be preferred for some ZIP codes but an alias name for other ZIP codes. This frequently occurs when the exact political boundary between adjacent cities is obscure, leading people to use the two city names interchangeably within the boundary area.

SORTED ORDER

ZIPList5 Max data records are sorted in ascending order by City Name, State Code, and ZIP code. If you prefer to order the data by ZIP code or some other order, we suggest that you import the data into your own database program where you can sort the data into the order you prefer.

MILITARY ZIP CODES and APO/FPO

The USPS delivers mail to US military installations around the world. As a result, the USPS has assigned ZIP codes to these facilities, even though they are actually on foreign soil. These ZIP codes have been given a state code which generally defines the area of the world in which they are found, and a city name of APO (Army Post Office) or FPO (Fleet Post Office). The military ZIP codes and assigned state codes are as follows:

ZIP Code Range	State Code	Area
09000 - 09999	AE	Europe
34000 - 34099	AA	Central America (Canal Zone)
96200 - 96699	AP	Pacific

Please note that these ZIP codes lie outside the territorial boundaries of the United States, and therefore do not include county name, county FIPS codes, latitude, longitude, MSA, PMSA, or market area information.

CALCULATING DISTANCE USING LATITUDE & LONGITUDE

In this database, the location of ZIP codes is defined in terms of degrees of north latitude and degrees of west longitude. Because of the spherical shape of the Earth, calculating the exact distance between two ZIP codes requires the use of spherical geometry and trigonometric math functions. However, you can calculate an approximate distance using much simpler math functions. For many applications the approximate distance calculation provides sufficient accuracy with much less complexity.

The following approximate distance calculations are relatively simple, but can produce distance errors of 10 percent of more. These approximate calculations are performed using latitude and longitude values in degrees, as defined in this database. The first approximation requires only simple math functions:

Approximate distance in miles = sqrt(x * x + y * y)

where
  x = 69.1 * (zip2.lat - zip1.lat)
and
  y = 53 * (zip2.lon - zip1.lon)

You can improve the accuracy of this approximate distance calculation by adding the cosine math function:

Approximate distance in miles = sqrt(x * x + y * y)

where
  x = 69.1 * (zip2.lat - zip1.lat)
and
  y = 69.1 * (zip2.lon - zip1.lon) * cos(zip1.lat/57.3)

If you need greater accuracy, you must use the exact distance calculation. The exact distance calculation requires use of spherical geometry, since the Earth is a sphere. The exact distance calculation also requires a high level of floating point mathematical accuracy - about 15 digits of accuracy (sometimes called "double-precision"). Many computer languages do not provide sufficient accuracy for this calculation. In addition, the trig math functions used in the exact calculation require conversion of the latitude and longitude values from degrees to radians. To convert latitude or longitude from degrees to radians, divide the latitude and longitude values in this database by 180/pi, or 57.2958. The radius of the Earth is assumed to be 6,371 kilometers, or 3,958.75 miles.

If you convert all latitude and longitude values in the database to radians before the calculation, use this equation:

Exact distance in miles = 3958.75 * arccos[sin(zip1.lat) * sin(zip2.lat) + cos(zip1.lat) *
cos(zip2.lat) * cos(zip2.lon - zip1.lon)]

If you do not first convert the latitude and longitude values in the database to radians, you must include the degrees-to-radians conversion in the calculation. Substituting degrees for radians, the calculation becomes:

Exact distance in miles = 3958.75 * arccos[sin(zip1.lat/57.2958) * sin(zip2.lat/57.2958) +
cos(zip1.lat/57.2958) *
cos(zip2.lat/57.2958) *
cos(zip2.lon/57.2958 - zip1.lon/57.2958)]

If the computer language you are using has no arccosine function, you can calculate the same result using the arctangent function, which most computer languages do support. Use the following equation:

Exact distance in miles = 3958.75 * arctan[sqrt(1-x^2)/x]

where x = [sin(zip1.lat/57.2958) * sin(zip2.lat/57.2958)] + [cos(zip1.lat/57.2958) *
cos(zip2.lat/57.2958) * cos(zip2.lon/57.2958 - zip1.lon/57.2958)]

Using the latitude and longitude values provided by this database, you should be able to obtain distance accuracy of approximately +/- 36 feet.

If your distance calculations produce wildly incorrect results, check for these possible problems:

1. Did you convert the latitude and longitude values from degrees to radians? Trigonometric math functions such as sine and cosine normally require conversion of degrees to radians, as described above.

2. Are the equations implemented correctly with necessary parentheses? Remember the old math precedence rule: MDAS - multiply, divide, add, subtract.

3. Does your computer language provide sufficient mathematical accuracy? Many languages simply do not provide the required floating point precision. For best results, you need about 15 digits of accuracy. Older versions of Basic, for example, often provide much less accuracy than required for the exact distance calculation.

4. Did you retain decimal points in the latitude and longitude values? When you imported the data into your database program, you may have lost the decimal point during the importation of latitude and longitude values.

ZIP Code 45275

ZIP code 45275 is unusual in that it violates the usual rules for ZIP code assignment.

ZIP code 45275 is assigned by the USPS to the Cincinnati - Northern Kentucky International Airport. The USPS has assigned an Ohio ZIP code and the “actual” city name Cincinnati, Ohio to this ZIP code even though the airport lies entirely inside of the State of Kentucky.

We have adjusted the county name, county FIPS code, area code, and other information to match the physical reality of Kentucky instead of Ohio. This means that 45275 has the county name and FIPS code of Boone County, Kentucky, even though it is known (by the USPS, at least) as Cincinnati, OH.

MISSING AREA CODES AND COUNTIES

All records for areas outside of the normal domestic calling areas of the United States have the area code field set to "000". This applies primarily to APO/FPO (military) ZIP codes and ZIP codes for some Pacific Islands. These places also have no county FIPS code or county name.

UNUSUAL COUNTIES

Alaska Counties - Alaska officially has no counties, according to the usual political definition of the word. Instead, Alaska has sixteen "boroughs", one for each of the major cities. For statistical and budgetary purposes the US Government (Census Bureau) has created eleven additional "Census Areas" to cover the remainder of Alaska. These 27 boroughs and census areas make up the "county equivalents" for Alaska used in this database.

Kalawao County, HI - This "county" formerly was a leper colony on the island of Molokai. It has no county government. Many databases omit it entirely. However, Kalawao has one small community of about 80 residents, Kalaupapa, with its own ZIP code (96742), a post office, and mail delivery. For that reason we have chosen to include Kalawao County in our database, even though the USPS omits it from the "official" USPS city-state database.

Yellowstone National Park County, MT - This "county" is actually that small part of Yellowstone National Park which lies within the borders of the state of Montana. It has no towns, no inhabitants (unless you count the animals), no county government, and no mail delivery. The US Government recently removed this county from its list of "official" counties. For these reasons we have chosen to omit it from our databases as well. Portions of this area lie within the boundaries of three ZIP codes: 59027, 59030, and 59758, all of which are assigned to towns in other counties.

WRONG COUNTY SHOWN FOR SOME CITIES

ZIPList5 Max is a ZIP code database. It is not a city-state-county database. The information in each record is related to the 5-digit ZIP code in that record. That can lead to some combinations of city and county which appear to be wrong.

For example:

ZIP Code	City	State	County
80214	Denver	CO	Jefferson

Some observant people have pointed out that the city of Denver and Denver county are geographically one and the same. Therefore if an address is in the city of Denver, it must also be in Denver county. However, according to the US Postal Service, the ZIPList5 Max record above is actually correct as presented. How can that be?

One part of the answer is that ZIP code boundaries and political boundaries almost never exactly coincide. For that reason, the county designation for a 5-digit ZIP code such as 80214 can be somewhat misleading; some addresses within the ZIP code boundaries lie in one county and some in another. That is the case with 80214: part of it lies in Jefferson County and part in Denver County. To find the absolutely correct county for a given address, one must always use the full street address or the ZIP+4, not just the 5-digit ZIP code. Our product Perfect Address does this.

By examining the address data for ZIP code 80214 contained in the National ZIP+4 Address Database (one of our other products), you would find that 1,749 address records indicate Jefferson County, while only 31 indicate Denver County. Clearly at the 5-digit level Jefferson County is the correct county designation for ZIP code 80214. That is the reason the USPS designates 80214 as Jefferson County.

The next question is what city name should be applied to 80214. This question is not always easy to answer. As in most states, some parts of Colorado lie in "unincorporated county" areas, where there is no "official" city designation. The people who live in 80214 are probably happy to be called "Denver". Thirty-one address records actually do exist in Denver city and county, while the rest lie in that unincorporated area of Jefferson County which has no city name. Hence Denver becomes the most logical city name to apply to 80214, even though more of 80214 lies within Jefferson County than Denver County. So we end up with a ZIPList5 Max record for ZIP code 80214 showing the city name of Denver but a county name of Jefferson.

COUNTY, ZIP CODE, AND AREA CODE BOUNDARIES

County boundaries, state boundaries, ZIP code boundaries, area code boundaries, and time zone boundaries are all administered by different federal, state, and local government and private agencies. As you probably already know, cooperation between these various agencies is virtually nonexistent. As a result, these various boundaries do not necessarily align. This means that a given ZIP code area may actually cross one or more county, area code, and/or time zone boundaries. But each ZIP code record in ZIPList5 Max has only a single field each for county name, area code, or time zone. An attempt to add additional records to document all the variations which can occur would make the product too complex and difficult to use, and is beyond the scope of this inexpensive database.

We provide the most accurate information for each ZIP code by selecting the most prevalent county, area code, and time zone for each ZIP code in the database. However, you should be aware that because of this boundary alignment problem the county name and FIPS code, area code, and time zone provided for each ZIP code in the database may not apply to every address which lies within the boundaries of that ZIP code.

Where multiple area codes exist within one ZIP code zone we have selected the most prevalent area code. This means that in areas such as Houston or the State of Maryland where area code "overlays" exist, we list only one area code - the one area code used by the most people in that area.

When a new area code is announced by the telephone companies, we update this database only ON or AFTER the effective date when dialing with the new area code is permissible. That way you are assured that all area codes in the database are valid and active on the date the database was created.

MARKET AREA

The CD Light Market Area geographic scheme divides the United States into 280 market areas. Every ZIP code in all 50 states is assigned to a market area, with no overlap. A particular market area may be made up of counties or portions of counties in one, two, or more contiguous states. No ZIP code is split across a market area boundary.

This market area geographic system has gained general acceptance within the business community as a basic approach to structuring advertising and promotion as well as determining the extent of distribution systems, sales and franchise territories, etc. The market area scheme is superior to a scheme based on MSA/PMSA because a market area generally covers an area considerably larger than the equivalent MSA/PMSA, there are fewer market areas then MSA/PMSAs (280 versus 336), and market areas cover the entire country, while MSA/PMSAs omit the rural areas of most states.

DO ZIP CODES EVER CHANGE?

Yes, ZIP codes do change, and far more often than you might imagine. Many parts of the country are growing, with new subdivisions and streets being added daily. As the population density increases in urban areas, apartment buildings replace single-family dwellings. The US Postal Service is constantly forced to add more ZIP+4 codes just to handle the growth. And just like area codes, a given 5-digit ZIP code can reach its ZIP+4 expansion limit. This forces the USPS to split existing ZIP codes and add new ZIP codes. When ZIP code ranges become too fragmented or because of USPS service area changes, entire ranges of 5-digit ZIP codes are sometimes "realigned". Such realignments can affect hundreds of thousands of addresses. It isn't unusual for hundreds of new 5-digit ZIP codes to be assigned or hundreds to be deleted by the USPS in each calender quarter.

ZIP CODES CHANGE EVERY MONTH

You have received from us the most accurate and up-to-date list of zip codes you can get anywhere! Each month the USPS adds, deletes, or modifies dozens of zip codes. Yes, they do add and delete zip codes each month! We receive the current list of active ZIP codes directly from the US Postal Service each month. If you can't find a ZIP code in our database, there is just one simple reason: your ZIP code is not an active ZIP code at this time! If your list of ZIP codes is a few years old, there may be thousands of differences between your list and the current list of active ZIP codes.

Our database is correct. If you were to get the data directly from the USPS you would find exactly the same ZIP codes as in our database. And it would cost you a lot more!

QUARTERLY and MONTHLY UPDATES AVAILABLE

With all these changes happening so fast, it is hard to keep up. That is why we offer quarterly and monthly updates for ZIPList5 Max. If you need the most current ZIP code and area code information, we suggest a quarterly or monthly subscription to ZIPList5 Max. A quarterly subscription consists of four quarterly releases (the current version plus the next three quarterly updates). A monthly subscription consists of 12 monthly releases (the current version plus the next 11 monthly updates). Order once, pay once, and receive a full year's worth of the latest ZIP code data. Best of all, we offer this service at a discounted price. If you did not specify a subscription when you placed your original order, contact CD Light within 30 days of your original purchase. We will convert your order to a subscription, and credit your original purchase price toward the subscription fee. For more details, see our Internet site, www.zipinfo.com, or call us at 866-256-2042.

ERRORS and OMISSIONS

Over time the ZIP code data in ZIPList5 Max will become "out-of-date". If you find something you believe to be wrong we would like to hear from you. Please send your comments to us via any of these methods:

Voice 866-256-2042 or 281-292-3270
email support@zipinfo.com

Thanks for choosing ZipLis5 Max!

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