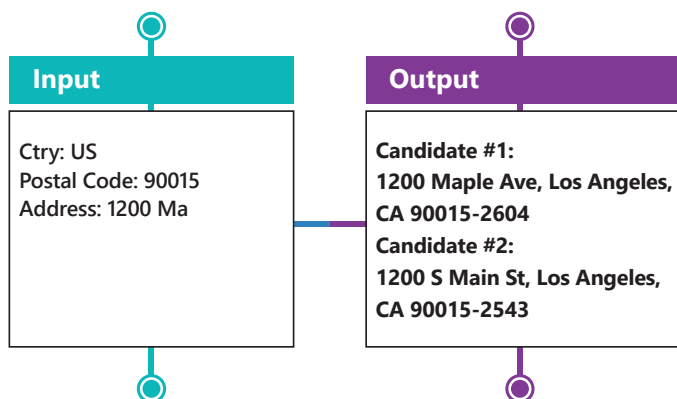# melissa

Using Global Express Entry

Auto-completion Analysis for the United States

INTRODUCTION:

Melissa's Global Express Entry, a cloud-based, auto-completion tool, offers pre-validated addresses for over 240 countries and territories, speeds up e-commerce checkout to improve the customer experience, helps website conversions, and ultimately reduces your costs associated with returned shipments due to incorrect addresses. Every country has a different mailing format standard. For example, Canada has a municipality, province and alphanumeric postal code, but Japan has a city, prefecture and numeric postal code. Performing auto-completion can differ from country to country depending on the type and style of addresses as well as the use case. With 131 different global address formats included, standardized address data means you can deliver everywhere easily. This document will look at the address format data for the United States and help you understand how to best use Global Express Entry to complete addresses. We will explore how many keystrokes we estimate are needed to complete your address or address part.

Free Form Input

Express Entry completes addresses as you type them in. The Free Form Search searches the entire U.S. data for an address. Enter the first few characters of an address and search for address here:

> 22382 aven| ×

> 22382 Avenue 12, Madera, CA 93637-9350
> 22382 Avenida Empresa, Rancho Santa Margarita, CA 92688-2112

City:
State:
ZIP Code:

Clear

Global Express Entry Endpoints

When using Global Express Entry, we will often be asked for a number that someone will need to complete X number of addresses. However, Global Express Entry can be used in many different ways that it is impossible to boil it down to a single number. There are also factors that influence the number of requests needed including:

- The quality of the input data

- The end point used

- The data you are completing (address or thoroughfare or postal code, etc)

- How efficient your code is with using the service

Normally when completing addresses, we would recommend allotting 4-5 times the completion attempts as the number of addresses you are estimating to complete. This is a general default estimate. One of the purposes of this document is to provide additional information to better inform the user.

Input

Ctry: US
Postal Code: 90015
Address: 1200 Ma

Output

Candidate #1:
1200 Maple Ave, Los Angeles, CA 90015-2604
Candidate #2:
1200 S Main St, Los Angeles, CA 90015-2543

Let's take a look at the different endpoints:

Endpoints	Short Description
GlobalExpressPostalCode	GlobalExpressPostalCode is provided as a convenient method for quickly retrieving locality and administrative area information using the postal code as the input. A subsequent call to GlobalExpressAddress benefits greatly by using the locality and administrative area information from GlobalExpressPostalCode with GlobalExpressLocalityAdministrativeArea.
GlobalExpressLocalityAdministrativeArea	GlobalExpressLocalityAdministrativeArea is provided as a means of retrieving locality and administrative area combinations using the locality name.
GlobalExpressCountry	The GlobalExpressCountry endpoint returns the country names containing the search term in the 'Country=' parameter. Country names in five languages are returned: English, Spanish, French, German, and Simplified Chinese.
GlobalExpressThoroughfare	GlobalExpressThroughfare is a means for retrieving the thoroughfares within a Postal Code using the Postal Code and beginning of the thoroughfare name as the inputs.
GlobalExpressAddress	The GlobalExpressAddress service is consumed to retrieve results containing all of the available address elements of an address record: FormattedAddress, AddressLine1-8, CountryISO3166_1_Alpha2, CountryISO3166_1_Alpha3, CountryISO3166_1_Numeric, SubNationalArea, PremisesNumber, AdministrativeArea, SubadministrativeArea, locality, dependentlocality, doubledependentlocality, thoroughfare, dependentthoroughfare, building, postalcode, and postbox.
GlobalExpressFreeForm	The GlobalExpressFreeForm service is provided as a means of retrieving all available address elements using a free form search.

United States of America

The United States is a country with a very standardized address structure with very good source data available. Additionally, the American population has a generally high level of address format knowledge. Compared to other countries, American addressing is quite clean.

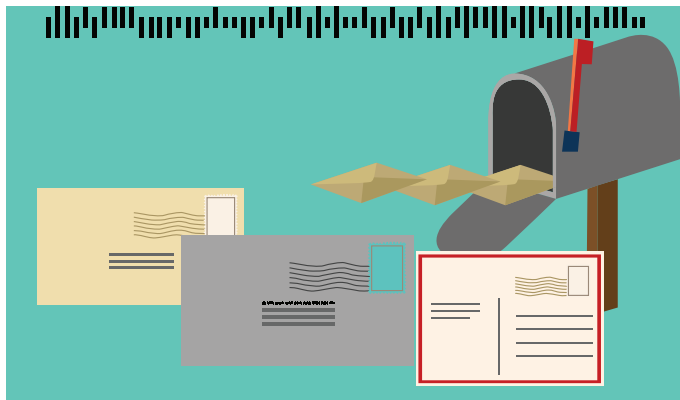The main components of a US address are as follows:

Address1

City

State

Zip

The minimum needed to uniquely determine a full address are:

Address1+Zip or Address1+City+State

This means you need either the zip code or the city+state. Of those two, the zip code requires many less characters, so starting with the zip code can speed things up.

Considerations

Top Down vs Bottom Up

The key to increase completion speed is to narrow down the number of candidate addresses as quickly as possible. The easiest way to do that is to start with a postal code using GlobalExpressAddress. Within the zip code of 92688, if I enter the house number of 22382, I am already narrowed down to a single address. However, if I am using GlobalExpressFreeForm, when I enter 22382 as the house number, the service has to search nationwide and we have thousands of candidates.

Wait for it

The beginning of a US address starts with the house number. If you start an address with 1 or 10, sending that text to Global Express Entry is likely not going to give you a good narrow candidate list, especially for GlobalExpressFreeForm. By waiting for the first space in Address1 before sending, you can minimize the number requests sent to the service and speed up capture.

Recommendations by service endpoints

Endpoints	Keystrokes	Examples	Recommendations
GlobalExpressPostalCode	3 to 4	Washington, 20521	Postal codes are 5 digits. You will likely not narrow down the correct postal code until the 3rd or 4th digit.
GlobalExpressLocality AdministrativeArea	1	San Diego, 92101	Based on the postal code, the Locality and Administrative Area are immediately completed.
GlobalExpressCountry	1	United States of America	There are only a few countries that start with U.
GlobalExpressThoroughfare	1 to 2	Saint Marks Pl, 10003	Depending on the postal code, you will likely have a few dozen thoroughfares possible. The first or second characters will likely narrow it down enough to contain the correct candidate.
GlobalExpressAddress	3 to 6	32 W 73rd St, New York, NY 10023-3187	Within a postal code, the number of addresses that can be completed are fairly narrowed down. You will likely have the list containing the correct candidate by the time you get to the first few letters of the thoroughfare.
GlobalExpressFreeForm	8 to12	555 Pennsylvania Ave NW, Washington, DC 20001-2114	House numbers and street names are not unique and repeated across many areas in the country. You likely will not narrow down the candidate list enough until mostly through the thoroughfare. Even more if it is a common thoroughfare like "Main".

ABOUT MELISSA

Our 35+ years of address expertise started with ZIP+4 and turned into so much more. Melissa is a single-source vendor of global address management, data quality and identity verification solutions that help organizations harness accurate data for a more compelling customer view. Our industry-leading solutions have processed over 1 trillion address, name, phone and email records, making it clear why thousands of businesses worldwide trust Melissa with their data quality needs. For more information, visit www.melissa.com or call 1-800-Melissa.