

Streamlined Sales Tax
Governing Board, Inc.

Technology Guide

Created and Maintained by:

Streamlined Sales Tax Certification and Registration Committee

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Resources

Surveys – available in SST Library, <http://www.streamlinedsalestax.org/> and in SST ShareFile under Certification Committee, <https://sstgb.sharefile.com/login.aspx>

Official **XML schemas and Minimal Required Error Messages** are available on the FTA E-Standards (formerly TIGERS) website at <http://www.statemef.com>, under Index of E-Standards XML Schema Packages, Sales and Excise, Streamlined Sales. The E-Standards group listserv is an FTA E-List.

The [Streamlined Sales Tax website](#) page has the following information:

- Technology Guide
- Current Schema Set: SST2015V01
- Basic SER Fields list

Chapter 5 Rates and Boundary Databases

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I. Overview

The Streamlined Sales and Use Tax Agreement (SSUTA) requires states develop and maintain rate and boundary files for use in determining the tax rates based on destination or origin sourced sales by using the address, nine or five-digit zip code applicable to either the destination or origin as required by the state.

The information contained in this document explains:

1. The state's requirements in creating and maintaining these databases.
2. The format requirements for the rate and boundary databases.
3. When and where the rate and boundary databases are to be posted; and
4. How to use the rate and boundary files to determine the taxing jurisdictions that apply to an address, nine or five-digit zip code, and the tax rate that applies to those taxing jurisdictions, along with information on reporting the taxes on the Simplified Electronic Return (SER).

The SSUTA places restrictions on when rates may be changed and what products or services the rates apply to.

The SSUTA excludes certain items from the requirements of the SSUTA, which allows a state to impose different tax rates on those items. Except for different rates for food and drugs, the boundary and rate databases cannot be used to look up tax rates for items that have special rates (higher or lower than the general state or local tax rates) or that may be subject to state tax or to local taxes, but not both state and local taxes. (See SSUTA Section 302 and Section 308)

II. Summary of Agreement Language

The following is a summary of the language in the Agreement. See the SSUTA for details.

A. State and Local Tax Bases, SSUTA Section 302

- The local jurisdiction tax base must be identical to the state tax base unless otherwise prohibited by federal law.
- This does not apply to sales or use taxes levied on:
 - ▶ Fuel used to power motor vehicles, aircraft, locomotives, or watercraft
 - ▶ Electricity, piped natural or artificial gas or other fuels delivered by the seller
 - ▶ The retail sale or transfer of motor vehicles, aircraft, watercraft, modular homes, manufactured homes, or mobile homes
 - ▶ Energy, which means natural or artificial gas, oil, gasoline, electricity, solid fuel, wood, waste, ice, steam, water and other materials necessary and integral for heat, light, power, refrigeration, climate control, processing, or any other use in any phase of the manufacture of tangible personal property.

B. State and Local Tax Rates, SSUTA Section 308

- No member state shall have multiple state sales and use tax rates on personal property or services except:
 - ▶ A state may impose a single additional rate, which may be zero, on food and food ingredients and drugs as defined pursuant to the Agreement.
 - ▶ If federal law prohibits the imposition of local tax on a product subject to state tax, the state may impose an additional rate on such product, provided such rate achieves tax parity for similar products.
- A state that has local jurisdictions shall not have more than one local sales tax rate or more than one local use tax rate per local jurisdiction. The local sales and use tax rates must be identical.
- The provisions of this section do not apply to sales or use tax levied on:
 - ▶ Fuel used to power motor vehicles, aircraft, locomotives, or watercraft
 - ▶ Electricity, piped natural or artificial gas or other fuels delivered by the seller
 - ▶ The retail sale or transfer of motor vehicles, aircraft, watercraft, modular homes, manufactured homes, or mobile homes
 - ▶ Energy, which means natural or artificial gas, oil, gasoline, electricity, solid fuel, wood, waste, ice, steam, water and other materials necessary and integral for heat, light, power, refrigeration, climate control, processing, or any other use in any phase of the manufacture of tangible personal property.

C. A state or local jurisdiction that allows a different local base as provided in Section 302 or a different rate on items or services as provided in Section 308 may provide an optional boundary file (Alternate Boundary file) identifying these rates and may allow reporting of these taxes on the SER in the format provided in this chapter. States that choose to require separate reporting of these taxes on the SER must notify the Governing Board of their intention to do so and the requirement would be effective no sooner than the first day of a calendar quarter beginning at least 6 months after notifying the Governing Board.

C.D. Notice for State Tax Changes, SSUTA Section 304

- States should make a reasonable effort to do the following:
 - ▶ Provide sellers with as much notice as practicable of state rate changes.
 - ▶ Limit the effective date of a rate change to the first day of a calendar quarter.
- Failure to follow these guidelines does not relieve a seller's obligation to collect the tax.

D.E. Local Rate and Boundary Changes, SSUTA Section 305

- Effective Date for Rate Changes: Provide that local rate changes will be effective only on the first day of a calendar quarter after a minimum of 60 days' notice to sellers. (120 days' notice for purchases from printed catalogs when tax is based on rates published in a catalog.)
 - ▶ Section 329: Each member state shall provide that the effective date of rate changes for services covering a period starting before and ending after the statutory effective date shall be as follows:
 - For a rate increase, the new rate shall apply to the first billing period starting on or after the effective date.

- For a rate decrease, the new rate shall apply to bills rendered on or after the effective date.
- Effective date of Boundary Changes: Apply local jurisdiction boundary changes only on the first day of calendar quarter after a minimum of 60 days' notice to sellers.
- Boundary Database: Provide and maintain a database that describes all boundary changes for all taxing jurisdictions, including a description of the change and the effective date of the change for sales and use tax purposes.
- Rate Database: Provide and maintain a database of all sales and use tax rates for all jurisdictions levying taxes within the state. Jurisdictions must be identified using the Federal Information Processing Standards (FIPS). Jurisdictions not having FIPS codes must be identified in the format determined by the Governing Board.
- Boundary Database – Zip Code: Provide and maintain a database that assigns each 5-digit and 9-digit zip code within the state to the proper tax rates and jurisdictions.
 - ▶ States must apply the lowest combined tax rate imposed in the zip code area if the area includes more than one tax rate in any level of taxing jurisdictions.
 - ▶ If a nine-digit zip code designation is not available for a street address or if a seller is unable to determine the nine-digit zip code designation of a purchaser after exercising due diligence to determine the designation, the seller may apply the rate for the five-digit zip code area. Query instructions for the zip code database will provide the correct jurisdiction code if either a zip + 4 or 5-digit zip is used.
 - ▶ For the purposes of this section, there is a rebuttable presumption that a seller or CSP has exercised due diligence if the seller or CSP has attempted to determine the tax rate and jurisdiction by utilizing software approved by the Governing Board that makes this assignment from the zip code information applicable to the transaction.
- Boundary Database – Address, SSUTA Section 305G
 - ▶ A state has the option of providing address-based boundary database records for assigning taxing jurisdiction and rates which shall be in addition to the zip code boundary database.
 - ▶ Database must be in same approved format as the Zip Code databases.
 - ▶ Database must meet the requirements developed pursuant to the Mobile Telecommunications Sourcing Act (MTSA.) The SST Boundary database may have additional fields not required by MTSA.
 - ▶ The Governing Board may allow a member state to require sellers that register under this Agreement to use an address-based system provided by that member state.
 - ▶ States that have an Address database must also create and maintain a Zip Code database for purposes of continuity and meeting the needs of the sellers until such a time that the Governing Board, as stated in 309G, decides to allow a member state to require sellers that register under this Agreement to use an Address database provided by that member state.
 - ▶ If any member state develops an address-based assignment system pursuant to the Agreement, a seller may use that system in place of Zip Code database.
 - ▶ If a seller is unable to determine the applicable rate and jurisdiction using an address-based database record after exercising due diligence, they may apply the 9-digit zip code designation applicable to a transaction. If a 9-digit zip code designation is not available for a street address, the seller may apply the rate for the 5-digit zip code.

- ▶ There is a rebuttable presumption that a seller or CSP has exercised due diligence if the seller or CSP has attempted to determine the tax rate and jurisdiction by utilizing software approved by the Governing Board that makes this assignment from the address and zip code information applicable to the transaction.
 - ▶ Certifying Vendor Provided Address-based Databases: States that have met the requirement of providing a Zip Code database may elect to certify vendor provided address-based databases for assigning tax rates and jurisdictions. The databases must be in the same approved form and must meet the requirements of the federal Mobile Telecommunications Sourcing Act. If a state certifies a vendor address-based database, a seller or CSP may use that database in place of the Address or Zip code database provided by the state.
- Make databases available to a seller or CSP by the first day of the month prior to the first day of a calendar quarter.
 - Databases must be in a format approved by the Governing Board, available on the state’s website or other location determined by the Governing Board.

E.F. Relief from Certain Liability, SSUTA Section 306

- States will relieve sellers and CSPs from liability for incorrect collection of sales or use tax resulting from reliance on erroneous tax rates, boundaries, or taxing jurisdiction assignments.
- States that provide an address-based system for assigning taxing jurisdictions will not be required to provide liability relief for errors resulting from the reliance on the 5 and 9-digit zip code data.

F.G. Databases Requirements and Exceptions, SSUTA Section 307

- Must be provided in a downloadable format approved by the Governing Board. Databases may be provided by the state or a vendor designated by the state. Database must be provided at no cost to the user of the database.
- The provisions in SSUTA Section 305 (F & G) do not apply when the purchased product is received by the purchaser at the business location of the seller.
- The databases are not a requirement of a states prior to entering into the Agreement. A seller that did not have a requirement to register in a state prior to registering pursuant to the Agreement or a CSP shall not be required to collect sales or use tax for a state until the first day of the calendar quarter more than 60 days after the state has provided the required rate and boundary databases.

III. Summary of state requirements to meet SSUTA requirements

The Agreement requires states develop and maintain the following rates and boundary databases to be in compliance with the Agreement. These databases, published on the SSTGB website, will provide one location for sellers to review all rate and boundary changes that impact sales and use tax with each state.

- A state must provide and maintain a database that assigns each **five-digit and nine-digit zip code within the state** to the FIPS code for each jurisdiction that imposes a tax within that zip

code. The state should only include the five-digit zip codes that are assigned to that state by the US Postal Service.

- A state may develop an additional address level database that assigns addresses within the state to the FIPS code for each taxing jurisdiction that address is in.
- Identify changes to these databases, which is done using beginning and ending effective dates for each record.
- A state must provide and maintain a database that assigns the tax rate to each FIPS code that is used in the state's boundary database for each jurisdiction and special jurisdiction that imposes a sales or use tax. Rates must be separated into the lowest level components, i.e. state, county, city, municipality, etc.
- A state may provide an optional boundary file (Alternate Boundary File) that identifies the rates that apply to products or services that have a different local base as provided in Section 302 or a different rate as provided in Section 308.

The databases will identify all jurisdictions, by FIPS codes, that impose sales or use tax within that zip code and the sales and use tax rates that each taxing jurisdiction imposes. The FIPS codes from the boundary database are used to determine the tax rate from the state's Rate database.

Users are required to use the address data when it is provided by the state. If the query does not find the address, the user should use the 9-digit zip code (zip +4) data. If no address or 9-digit zip code record is found, the query would fall back to the 5-digit zip code.

A state, depending on the number of state and local taxing jurisdictions that have a sales or use tax, will have different requirements regarding the level of granularity they will need to maintain in their databases. For example, New Jersey has no local jurisdictions with a sales or use tax and will have fewer data requirements than Texas which has many local and special taxing jurisdictions.

IV. Rate and Boundary Database Technical Directions

A. Database Format

The Agreement requires states use the database formats approved by the Governing Board. These formats were developed in consultation with the FTA E-Standards Group (an electronic filing standards committee for government business) and with technology providers and retailers. The database format was developed to follow the SSTP Agreement requirements that were effective January 1, 2006.

A state that develops the optional (Alternate) boundary file will follow this same boundary file format, with exception of specific fields to identify the alternate rates and the name of the file.

A common format allows all users to query any state's file using the same query instructions.

The format of the database is standard relational table.

The database posted to the SSTGB website must be in comma delimited or CSV format.

- ▶ Fields must NOT be truncated. A comma separated value, or else simply a comma, must be present for every field in the table, including all 20 special taxing district fields
- ▶ Leading zeros must be included (i.e., code 00100 must display as 00100)

B. File Names

States MUST use the following file naming convention:

- ▶ The first two digits are the state abbreviation, 'AR'.
- ▶ The third digit indicates what the file contains and can only be an 'R', ~~or~~ 'B', or 'A'. 'R' is for a Rate file, the 'B' is for a Boundary file, 'A' is for Alternate Boundary file.
- ▶ The next four digits are the year the file becomes effective, '2021'.
- ▶ The next two digits are "Q" for quarter and the quarter the file becomes effective, '1', '2', '3', '4'.
- ▶ The next three digits are the month the file was moved to the SST ShareFile site, 'NOV'.
- ▶ The last two digits are the day the file was moved to the SST ShareFile site, '27'.

Example of Arkansas Rate File for 1st quarter 2021 uploaded to the SST ShareFile site on November 27, 2020: ARR2021Q1NOV27

Files should be zipped when posted to website due to the file size. **Both Zipped and underlying CSV file must have the same file name.** Each file must have a unique name (date should be updated).

C. Database Location and Posting Dates

Database must be available on the state's website or other location as determined by the Governing Board. All rate and boundary files are to be available on the SSTGB website.

Rate and Boundary files are required to be available to a seller or CSP by the first day of the month prior to the first day of a calendar quarter. (SSUTA Section 305, I.) The Rate and Boundary file link is available on the SST website under For Business, For States and Certified Service Providers tabs.

Liability relief is provided for changes to Rate and Boundary files made available after the first day of the month prior to a calendar quarter until the first day of the following calendar quarter. (SSUTA Section 306 provides liability relief for use of the Rate and Boundary files. SSUTA Section 305 states effective dates of changes to the Rate and Boundary files.)

Only files that contain changes should be uploaded. If no changes were made, the previous file will continue to be used.

- States upload their changed files to the SST ShareFile Rates and Boundaries directory, placing the Rate file in the Rate folder and the Boundary file in the Boundary folder.
<https://sstgb.sharefile.com/> Files in the SST ShareFile Rate and Boundaries folder are not available to CSPs or the public.
- By the first day of the month prior to the beginning of a calendar quarter, Testing Central will move only the changed files to the SST website for public access. Testing Central will move the files to the SST website after noon on the last day of the month prior to the first day of each calendar quarter.

If a corrected or updated Rate or Boundary file is submitted on or after the first day of the month prior to the beginning of a calendar quarter, the state must do the following:

- Place the file in the SST ShareFile Rate and Boundaries folder.
- ~~Notify~~ Notify Testing Central by email the file has been moved to this directory with a brief explanation of the reason for the corrected or updated file.

- ~~Send Testing Central form TC0001 State Change Request (Located in the web site library).~~

Upon notification that the file is available on the SST ShareFile Rate and Boundaries folder, Testing Central will:

- Move the file to the SST website Rate and Boundary directory at [Rate and Boundary Files \(streamlinedsalestax.org\)](http://streamlinedsalestax.org)
- Update the SSTGB web site indicating an updated file is available. [Rate and Boundary File Updates \(streamlinedsalestax.org\)](http://streamlinedsalestax.org)
- Notify CSPs of new file.
- Send notice of new file to the Rate and Boundary mailing list. (CSPs are included on this mailing list.)

D. Database Fields

States must complete all fields in the databases for consistency in database queries.

The boundary database follows the MTSA format, with 7 additional fields added to allow querying the database by one of three methods: 5-digit zip code, 9-digit zip code (zip+4), or by address.

The fields that were added to the MTSA file format to create the SST Boundary Table are:

- Record Type – A one-character indicator that shows the record type:
 - “A” for an address-level record (data row),
 - “Z” for a zip-level record, and
 - “4” for a zip+4 level record.
- Zip Code Low (5 bytes) - The beginning 5-digit zip code for the range
- Zip Extension Low (4 bytes) - The beginning 4-digit extension for the range
- Zip Code High (5 bytes) - The ending 5-digit zip code for the range
- Zip Extension High (4 bytes) - The ending 4-digit extension for the range
 - The state may create zip code ranges for consecutive 5 or 9-digit zip codes that are contained within the same taxing jurisdictions (all zip codes within that range will have the same FIPS codes assigned). A state may have some zip code ranges and some individual zip code rows.
- Composite SER Code (5 bytes) - Code used to report tax amounts on the SER in states requiring the total tax be reported for a transaction under one code, rather than multiple codes.
- FIPS State Indicator – Indicates if the state tax applies to a record (data row) in the database. If state tax applies the State Indicator is the same as the State Code; If state tax does not apply the State Indicator is “00”.

E. FIPS Codes

Each taxing jurisdiction is identified using the Federal Information Processing Standards (FIPS) code for that jurisdiction. A unique FIPS code is used for each jurisdiction within the state. However, FIPS codes are not unique between states. Another state may use the same FIPS codes.

The 2019 FIPS Codes (United States Census Bureau) are located at <https://www.census.gov/geographies/reference-files/2019/demo/popest/2019-fips.html>

The Jurisdiction FIPS Code are the FIPS codes from the boundary database for the state, county, Place (municipality), and Special Jurisdiction Codes

- FIPS State and FIPS State Indicator
 - ▶ The FIPS state code is required in each database row or record because it identifies which state the record is for and is used to link to the correct state rate database.
 - ▶ The FIPS State Indicator indicates if a state-level sales tax applies to that boundary row. The FIPS State Indicator field must either be equal to the FIPS State Code or “00” if no state tax applies. Some locations in a state may not be subject to the state sales tax, such as Indian tribal lands.

F. Beginning Effective/Ending Effective Dates

For both the boundary and rates database, the rows are date dependent. Each record has a Beginning Effective and an Ending Effective date that shows the period that line item was effective.

1) When the database is initially created:

- The Beginning Effective Date fields should be the date the database is created.
- All Ending Effective Date fields should be set to a future date, such as “29991231” unless a specific end date for a tax for that address is known – if known then that end date should be used. (For example: a municipality imposes a higher rate from January 1, 2016 to midnight December 31, 2017. The begin date would be 20160101 the end date is 20171231.)

2) Changes to a database:

Changes in the boundary or rate files must be identified. Changes are identified by creating a new record (or line item) when the address, zip code, or rate is changed.

When a file has incorrect data, it is important to end the line that is incorrect, then start a new line with the corrected data. This provides CSPs data to correctly return same tax on returned items as was assessed on transactions made prior to changes. It also provides data to document when the CSP should have liability relief due to errors or changes provided by the states.

It is important to track the dates notices (TC0001) are sent to CSPs, other than the first of a calendar quarter, as liability relief is based on when notice is provided to the CSPs.

States should try to limit all additions and changes to the rate and boundary files to the first day of the next calendar quarter when possible.

1. Adding new address or rate for start of a quarter:

- Use the first day of the next calendar quarter as the Beginning Effective Date.

- No notice (TC0001) is required if the change is dated the first of the quarter and submitted and posted 30 days prior to the first of the quarter.

Example: Added new address effective 10/1/2017

A	20171001	29991231	722	724	E	S	10TH	ST					ABERDEEN	57401		
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Liability:

- ▶ Corrections/updates to CSP files and to seller's files must be made by the first of the quarter. There is no additional liability relief provided to CSPs or sellers for Rate and Boundary file changes effective on the first of the quarter that are submitted to Testing Central and posted to the SSTGB website 30 days prior to the first day of the quarter.

2. Correcting address or rate for start of a quarter:

- On the line for the Incorrect Address: Enter the Ending Effective Date
- On the line for the Corrected Address: Enter date address is corrected as the Beginning Effective Date. The Beginning Effective Date for the corrected line must be after the Ending Effective Date for the incorrect line.
- No notice (TC0001) is required if the change is dated the first of the quarter and submitted and posted 30 days prior to the first of the quarter.

Example: Corrected address effective 10/1/2017

A	20170401	20170930	220	220	E		OAK	AVE				AVON	57555	2118			46	46	91	7180
A	20171001	29991231	220	220	E		OAK	ST				AVON	57555	2164			46	46	91	7180

Liability:

- ▶ Corrections/updates to CSP files and to seller's files must be made by the first of the quarter. There is no additional liability relief provided to CSPs or sellers for Rate and Boundary file changes effective on the first of the quarter that are submitted to Testing Central and posted to the website 30 days prior to the first day of the quarter.

3. Adding address or rate in the middle of a quarter:

- Use the date address or rate is added as the Beginning Effective Date.
- Complete TC0001 and send to Testing Central for notification to the CSPs of this change. No notice (TC0001) is required if the change is dated the first of the next calendar quarter and submitted to Testing Central and posted to the SSTGB website 30 days prior to the first day of the quarter.

Example: Added an address on 8/15/2017.

A	20170815	29991231	730	730	E	S	10TH	ST					ABERDEEN	57401		
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Liability:

- ▶ The CSP has 10 business days after they receive notice of the change to correct their records. (CSP Contract)
- ▶ All other sellers will not be liable for this change until the first day of the next calendar quarter, which begins 10/1/2017. SSUTA Section 305

4. Correcting address or rate during the quarter:

- On the line for the Incorrect Address: Enter the Ending Effective Date

- On the line for the Corrected Address: Enter date address is corrected as the Beginning Effective Date. The Beginning Effective Date for the corrected line must be after the Ending Effective Date for the incorrect line.
- Complete TC0001 and send to Testing Central for notification to the CSPs of this change. No notice (TC0001) is required if the change is dated the first of the quarter and submitted and posted 30 days prior to the first of the quarter.

Example: Corrected the Zip Extension.

A	20170401	20170814	220	220	E		OAK	AVE			AVON	57555	2118			46	46	91	7180
A	20170815	29991231	220	220	E		OAK	AVE			AVON	57555	2164			46	46	91	7180

Example: State accidentally omitted the state code.

A	20170701	20170814	1	475	B		PO BOX				AVON	57555	0			46		87	7180
A	20170815	29991231	1	475	B		PO BOX				AVON	57555	0			46	46	87	7180

Liability:

- ▶ The CSP has 10 business days after they receive notice of the change to correct their records. (CSP Contract) Notice is provided through use of TC0001 State Change Form.
- ▶ All other sellers will not be liable for this change until the first day of the next calendar quarter, which begins 10/1/2017. SSUTA Section 305.

G. Archiving Records

To control the size of the database, records over five years old may be purged to an archive file. (5 years old based on the Ending Effective Date)

V. Boundary Database Format

The boundary database is designed to provide one database for all boundary queries regardless of the level of detail the state provides.

Data may be queried using a 9-digit zip code (zip +4), a 5-digit zip code, or if provided by the state, using an address.

Each row on the database must be unique for the query to return one record, based on the record type queried (Address, 9-digit or 5-digit zip code). An address, 9-digit or 5-digit zip code can only be valid for one row of the database. (The exception being when there are two or more of the same row on the database due to effective dates.)

Queries must return all jurisdiction FIPS codes that apply to that zip code or address.

Upon retrieving the FIPS codes from the boundary database, the user will access the rate database to obtain the tax rates for the FIPS codes to use to compute the tax.

A. "A" - Address Level Boundary Records

Address records have Record Type equal to "A."

The zip code low and high fields and the zip extension low and high fields are null (blank) on address records. This will allow vendors to get the same FIPS results regardless of how they query the database.

The state may create address ranges for consecutive Low/High Address Range that are contained within the same taxing jurisdictions (all zip codes within that range will have the same FIPS codes assigned). An address range is only for addresses that have same Street Name, City Name and Zip Code, Zip Extension. A state may have some ranges and some individual address rows.

States must also create data rows that allow query by just a 5-digit zip code and by just a 9-digit zip code.

An address search may be performed using the address with only the 5-digit zip code. The address record may contain the 9-digit zip code, but a search by 5-digit zip with the address is okay.

PO Boxes may be entered using ranges. PO Box goes in the Street Name, the Range High/Low may be either numeric (1 – 9999) or alpha (a-z) but cannot be combined numeric/alpha (1A-9999Z). The Plus4 cannot be added to a combined PO Box range at the A level but should be included in the 4 Level.

Some states may have their own address level database from which they can generate the SSTP Boundary Table. If a state has an address-based system of determining taxing jurisdiction that complies with MTSA, the state can populate the SSTP Boundary Table.

Record Type	Begin Date	End Date	Low Address Range	High Address Range	Odd / Even Range Indicator	Street Pre-Directional Abbr.	Street Name	Street Suffix Abbr	City Name	Zip Code	Plus 4	FIPS State	FIPS State Indicator	FIPS County	FIPS Place
A	20120101	29991231	1000	2000	O	SW	Simple	DR	Anywhere	84075	5545	49	49	003	12345
A	20120101	29991231	2001	2001	O	SW	Simple	DR	Anywhere	84075	5546	49	49	003	12345

B. “4” - 9-Digit Zip Code Boundary Records

9-digit zip code records have Record Type equal to “4.”

The street name field contains null (blank) values on 9-digit zip code rows.

The jurisdictions associated with this data row are the lowest rates for that 9-digit zip code.

These rows are used as a fall back when an address cannot be found.

The 9-digit zip code rows are required, as there may be multiple address level rows for a 9-digit zip code due to multiple taxing jurisdictions within a 9-digit zip code.

A state may create zip code ranges for consecutive 9-digit zip codes that are contained within the same taxing jurisdictions (all zip codes within that range will have the same FIPS codes assigned). A state may have some zip code ranges and some individual zip code rows.

A 9-digit zip code may not be in more than one “4” record, with exceptions of when there are two or more of the same row on the database due to past changes effective dates.

Record Type	Beginning Effective Date	Ending Effective Date	Low Address Range	City Name	Zip Code	Plus 4	Zip Code Low	Zip Ext Low	Zip Code High	Zip Ext High	Composite SER code	FIPS State	FIPS State Indicator	FIPS County	FIPS Place
4	20100101	29991231					84075	0001	84076	9999		49	49	003	12345
4	20100101	29991231					84078	1234	84078	1234		49	49	003	12333

C. “Z” - 5-Digit Zip Code Boundary Records

5-digit zip code records have Record Type equal to “Z.”

The street name field and the Zip Extension Low/High must contain null (empty) values.

5-digit zip code records must have the Zip Code Low and Zip Code High fields.

The state should only include 5-digit zip codes assigned to that state by the USPS.

A state may create zip code ranges for consecutive 5-digit zip codes that are contained within the same taxing jurisdictions (all zip codes within that range will have the same FIPS codes assigned). A state may have some zip code ranges and some individual zip code rows.

The jurisdictions associated with this data row are the lowest rates for that zip code or zip code range.

These rows are used as a fall back when an address or 9-digit zip code cannot be found.

A zip code may not be in more than one “Z” record, with exceptions of when there are two or more of the same row on the database due to past changes effective dates.

Record Type	Beginning Effective Date	Ending Effective Date	Low Address Range	...	City Name	Zip Code	Plus 4	Zip Code Low	Zip Ext Low	Zip Code High	Zip Ext High	Composite SER code	FIPS State	FIPS State Indicator	FIPS County	FIPS Place
Z	20100101	29991231						84075		84075			49	49	003	
Z	20100101	29991231						84076		84099			49	49		

D. Composite State (combined reporting)

A state may require tax amounts be reported on the SER under each individual taxing jurisdiction or the state may require the tax for all jurisdictions be totaled and reported under a composite SER code.

Composite Codes:

If a state requires combined reporting, a composite SER code is included for each record in the boundary database.

If a state does not require combined reporting, the Composite SER Code is Null/Blank.

When a Composite Code is used, the user will look up the tax rates using the state, county, place, and any special jurisdiction codes and calculates the tax for each code. The tax is then combined and reported on the SER using the composite SER code as the jurisdiction.

Record Type	Beginning Effective Date	Ending Effective Date	Low Address Range	...	City Name	Zip Code	Plus 4	Zip Code Low	Zip Ext Low	Zip Code High	Zip Ext High	Composite SER code	FIPS State	FIPS State Indicator	FIPS County	FIPS Place
4	20100101	29991231						84075	0000	84076	9999	98765	49	49	003	12345

E. Boundary Database Field Requirements

Identifies if the data is required based on Record Type, Length of Data, Format of Data.

Null Plus 4 fields are shown as “0000”. Optional fields are left empty if not used.

The Boundary file should have a total of 54 columns.

Column	Field Name	Length	Type Format	Record Type			Comment/Descriptions	Codes and Examples
				Address Level	9-Digit Zip Level	5-Digit Zip Level		
A	Record Type	1	Char	Must equal “A”	Must equal “4”	Must equal “Z”	Indicates format of record	A = Address 4 = 9-digit zip (zip+4) Z = 5-digit Zip
B	Beginning Effective Date	8	Date CCYYMMDD	Required	Required	Required	Indicates the beginning date that record in the table should be used to retrieve address boundary data.	20040101
C	Ending Effective Date	8	Date CCYYMMDD	Required	Required	Required	Indicates the last date that record in the table should be used to retrieve address boundary data.	20040331

D	Low Address Range	10	Char	Required	Null (leave blank)	Null (leave blank)	This field can be used for two types of address data. For PO Box numbers or a range of numbers, it will contain the low end of a range of PO Box number(s). For an address that contains a street address(s), it will contain the low address range of the street address(s).	PO Box Example: PO Boxes run from 100-1500, Low Address Range = 100 High Address Range = 1500 Street Example: Address 816 N Main ST Low Address Range = 816 High Address Range = 816
E	High Address Range	10	Char	Required	Null	Null	This field can be used for two types of address data. For PO Box numbers or a range numbers, it will contain the high end of a range of PO Box number(s). For an address that contains a street address(s), it will contain the high address range of the street address(s).	PO Box Example: PO Boxes run from 100-1500, Low Address Range = 100 High Address Range = 1500 Street Example: Address 816 N Main ST Low Address Range = 816 High Address Range = 816
F	Odd/Even Indicator	1	Char	Dependent	Null	Null	Indicates if the given range of address(s) is odd or even. For PO Boxes field should be null (blank)	O – Odd E – Even B – Both
G	Street Pre-Directional	2	Char	Type Dependent	Null	Null	Should have a value if Street Post Direction does not have a value. For PO Boxes field should be Null (blank) (Primary Address-address line 1)	N, S, E, W, NE, NW, SE, SW
H	Street Name	20	Char	Required	Null	Null	Name of the city where the address occurs. (Primary Address-address line1)	
I	Street Suffix Abbreviation	4	Char	Type Dependent	Null	Null	Indicates the type of street (Primary Address-address line1)	AVE, ST, CRT, etc.
J	Street Post Directional	2	Char	Type Dependent	Null	Null	Should have a value if Street Pre-Directional does not have a value.	N, S, E, W, NE, NW, SE, SW

							For PO Boxes field should be Null (blank) (Primary Address-address line1)	
K	Address Secondary Abbreviation	4	Char	Optional	Optional	Optional	If highrise or firm (Secondary Address-address line 2)	
L	Address Secondary (Low)	8	Char	Optional	Optional	Optional	If highrise or firm (Secondary Address-address line 2)	
M	Address Secondary (High)	8	Char	Optional	Optional	Optional	If highrise or firm (Secondary Address-address line 2)	
N	Address Secondary (Odd/Even)	1	Char	Optional	Optional	Optional	If highrise or firm (Secondary Address-address line 2)	O – Odd E – Even B – Both
O	City Name	28		Required	Null	Null	Required for address query	
P	Zip Code	5		Required	Null	Null	5-digit zip code	
Q	Plus 4	4		Required	Null	Null	4-digit zip code extension	
R	Zip Code Low	5		Null	Required	Required	Low range for a 5-digit zip code	
S	Zip Extension Low	4		Null	Required	Null	Low range for a 4-digit zip code extension	
T	Zip Code High	5		Null	Required	Required	High range for a 5-digit zip code. If range is for a single zip code this is same as the low range.	
U	Zip Extension High	4		Null	Required	Null	High range for a 4-digit zip code extension. If range is for a single zip code this is same as the low range.	
V	Composite SER Code	5		Optional	Optional	Optional	If a composite SER Code is listed, the state requires the seller/CSP report the combined tax for that transaction under the composite code on the SER.	
W	FIPS State Code	2		Required	Required	Required	State FIPS code as defined by federal government	01, 10, 20, 21, 25
X	FIPS State Indicator	2		Optional	Optional	Optional	Equal to state FIPS code if state tax rate applies. Equal to "00" if state tax rate does not apply	01, 10, 20, 21, 25

Y	FIPS County Code	3		Optional	Optional	Optional	Required if a county tax rate is in effect. County FIPS code as defined by federal government.	111, 584, 958
Z	FIPS Place Code (Municipality) Number	5		Optional	Optional	Optional	Required when the city has a rate in effect. Includes: Place, city, municipality FIPS code as defined by federal government. Municipality township, named unincorporated area, tribal land, etc.	12548 Note tables differed in description – does this include unincorporated area/tribal land?
AA	FIPS Place Class Code	2		Optional	Optional	Optional	Place Class FIPS code as defined by federal Government.	55
AB	Longitude Data	7		Optional	Null	Null	Expressed as a coordinate	-100.582
AC	Latitude Data	7		Optional	Null	Null	Expressed as a coordinate	40.2582
AD	Special Tax District Code Source (#1)	2		Optional	Optional	Optional	Use when state has special taxing jurisdictions.	“VD” for Vendor Defined “ST” for State Defined.
AE	Special Tax District Code (#1)	5		Type Dependent	Type Dependent	Type Dependent	State assigned code for a special taxing jurisdiction.	
AF	Type of Taxing Authority Code (#1)	2		Type Dependent	Type Dependent	Type Dependent	Use when state has special taxing jurisdictions. Code List From: X12 Data Element 1721.	
AG-CK	Special Tax District Code Source (#2 through #20)	2					Use when state has special taxing jurisdictions.	“VD” for Vendor Defined “ST” for State Defined.
AG-CK	Special Tax District Code (#2 through #20)	5					State assigned code for a special taxing jurisdiction.	
AG-CK	Type of Taxing Authority Code (#2 through #20)	2					Use when a state has special taxing jurisdictions. Code List from: X12 Data Element 1721.	

F. Taxing Authority Type Code – X12 Data Element 1721

Any request for additions or changes to this list must be made through the FTA E-Standards group, which is a work group of X12.

Note: The numbers are not consecutive and some numbers are not used.

00	County	24	Reclamation District	51	Annual County Bond Authority
01	City	25	Fire or Police	52	Semi-annual County Bond Authority
02	Town	26	Roads or Bridges	53	Annual City Bond Authority
03	Village	27	Hospitals	54	Semi-annual City Bond Authority
04	Borough	29	Other Municipal Services	59	Other Bond Authority
05	Township	40	Township and County	61	Assessment District
09	Other Municipality	41	City and School	62	Homeowner's Association
10	School District	42	County collected by Other Taxing	63	Special District
11	Junior Colleges	43	State and County	69	Other Special Districts
19	Other Schools	44	Central Collection Taxing Authority	70	Central Appraisal Taxing Authority
20	Water Control	45	State Taxing Authority	71	Unsecured County Taxes
21	Utility District	49	Other Combination Collection	72	Mobile Home Authority
22	Sanitation	50	Bond Authority	79	Other Special Applications
23	Water or Sewer District				

VI. SSTGB Boundary Table Example

Header rows are not included in the CSV file.

A	B	C	D	E	F	G	H	I	J	K
Record Type	Beginning Effective Date	Ending Effective Date	Low Address Range	High Address Range	Odd / Even Range Indicator	Street Pre-Directional Abbr.	Street Name	Street Suffix Abbr	Street Post Directional	Address Secondary Abbreviation
A	20100101	29991231	1000	2000	O	SW	Simple	DR		
4	20100101	29991231								
Z	20100101	29991231								

L	M	N	O	P	Q	R	S	T	U	V	W
Address Secondary (low)	Address Secondary (high)	Address Secondary (odd/even)	City Name	Zip Code	Plus 4	Zip Code Low	Zip Extension Low	Zip Code High	Zip Extension High	Composite SER code	FIPS State
			Anywhere	84075	5545						49
						84075	5545	84075	5545		49
						84075		84075			49

X	Y	Z	AA	AB	AC	AD	AE	AF	AG:CH	CI	CJ	CK
FIPS State Indicator	FIPS County Code	FIPS Place Code	FIPS Place Class Code	Longitude Data	Latitude Data	Special Tax District Code Source (#1)	Special Tax District Code (#1)	Type of Taxing Authority Code (#1)	... Repeat AD-AF as needed or leave blank	Special Tax District Code Source (20)	Special Tax District Code (20)	Type of Taxing Authority Code (20)
49	003	11111				ST	22222	49				
49	003	11111				ST	22222	49				

49												
----	--	--	--	--	--	--	--	--	--	--	--	--

Address level CSV File

A,20030101,20051231,1000,2000,O,SW,SIMPLE,DR,,,,,Anywhere,84075,5545,,,,,49,49,003,11111,,,,,ST,2222,49,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

9-digit zip code CSV File

4,20100101,29991231,,,,,,,,,,,,,84075,5545,84075,5545,01724,49,49,003,11111,,,,,ST,2222,49,,,,,,,,,,,,,
 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

5-digit zip code CSV File

Z,20100101,29991231,,,,,,,,,,,,,84075,,84075,,01724,49,49,,,

CSV file does not include headers. It is data only.

CSV file includes “,” for each field out through the 20 Special Jurisdictions. Do not include extra “,” at the end.

Alternate Boundary File

A state may use an Alternate Boundary file to identify the tax rates for products the state or local jurisdictions have where a different rate or base applies as allowed by the SSUTA Sections 302 and 308. This table is optional for the states. The codes for these items cannot be included on the State Boundary table because they only apply to specific products.

If the state or any local jurisdiction in that state has an alternative rate or base for any of the 14 products as allowed by SSUTA, the state may identify the tax rate by entering a code for that product for all addresses and zips on an Alternate Boundary file. Different codes are needed to identify the different jurisdiction, different base or different rate. For example, if Town A taxes Energy at 3% and Town B taxes Energy at 4% and Town C exempts Energy, a different code specific to Town A, B, and C is required.

The State may make up will create these codes. No code can be the same as any other code in the state’s Boundary file.

Codes are only added for products that have an alternate rate or base. For example, if Energy is at a lower rate or exempt from a local tax, ~~then it will have a separate code~~ the state would enter codes for Energy for all address/zip codes in the boundary file. The state does not enter codes for other products that do not have a different base or rate.

- A. Use composite like reporting: One code is used to look up the one combined (total) tax rate. All state and local jurisdiction taxes due on that transaction is calculated and reported based on a single code. The Alternate Boundary file will not list a code for each jurisdiction.
- B. Use single code that is assigned to each address, 9-digit zip, or 5-digit zip, that reflects the lowest rate that applies to that product for all taxing jurisdictions that address, 9-digit zip, or 5-digit zip is located in. (In the Alternate Boundary file, columns are assigned for each specific product so that all states use the same columns for same products.)
- C. Rate File: The state will identify the total tax rate that applies to that product for each alternate code assigned at that address, 9-digit zip, or 5-digit zip code. This will include all state, local and special jurisdiction tax rates.

State must identify which products are subject to an alternate rate or base. This can be done using the TC0005 (CSP Change/Tax Rules form). There is a column to indicate a reduced rate and an explanation should be provided in the comments field.

Alternate Boundary File fields

The Alternate Boundary file follows the format of the State Boundary File, using many of the same fields.

Columns A through U will contain the same information as the Boundary File

Column V (composite code) will not be used – that field will be blank

Column W (FIPS State) is entered to identify the state

Columns X-AA (State FIPS Indicator, FIPS County Code, FIPS Place Code, FIPS Place Class Code) will not be used – these fields will be blank

Columns AB-AC (Longitude and Latitude) will be same as the Boundary file

Columns AD-AQ (previously special jurisdiction fields) will have the information identify a code for the 14 products the SSUTA allows at a different base or rate. This code will only be added to the columns for the product(s) the state or local jurisdiction has a different base or rate for. The state will not enter codes for products that do not have a different base or rate or if this file will not be used to determine the tax.

The Alternate codes are 5 characters (alpha and/or numeric)

Alternate Boundary file field requirements for columns AD-AQ

<u>Column</u>	<u>Field Name</u>	<u>Length</u>	<u>Type Format</u>	<u>Record Type</u>			<u>Comment/Descriptions</u>	<u>Codes and Examples</u>
				<u>Address Level</u>	<u>9-Digit Zip Level</u>	<u>5-Digit Zip Level</u>		
<u>AD</u>	<u>Fuel MV</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	<u>99234; MF100; MVF10</u>
<u>AE</u>	<u>Fuel Aircraft</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	
<u>AF</u>	<u>Fuel Locomotive</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	
<u>AG</u>	<u>Fuel Watercraft</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	
<u>AH</u>	<u>Electricity</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	

<u>AI</u>	<u>Piped Natural or Artificial gas</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	
<u>AJ</u>	<u>Other Fuels</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	
<u>AK</u>	<u>Motor Vehicle</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	
<u>AL</u>	<u>Aircraft</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	
<u>AM</u>	<u>Watercraft</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	
<u>AN</u>	<u>Modular Homes</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	
<u>AO</u>	<u>Manufactured Homes</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	
<u>AP</u>	<u>Energy Manufacturing</u>	<u>5</u>	<u>char</u>	<u>Optional</u>	<u>Optional</u>	<u>Optional</u>	<u>Use when state has a special rate or different base for state and local taxes</u>	

Alternate Boundary File Example

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>I</u>	<u>J</u>	<u>K</u>
<u>Record Type</u>	<u>Beginning Effective Date</u>	<u>Ending Effective Date</u>	<u>Low Address Range</u>	<u>High Address Range</u>	<u>Odd / Even Range Indicator</u>	<u>Street Pre-Directional Abbr.</u>	<u>Street Name</u>	<u>Street Suffix Abbr</u>	<u>Street Post Directional</u>	<u>Address Secondary Abbreviation</u>
<u>A</u>	<u>20100101</u>	<u>29991231</u>	<u>1000</u>	<u>2000</u>	<u>O</u>	<u>SW</u>	<u>Simple</u>	<u>DR</u>		
<u>A</u>	<u>20100101</u>	<u>29991231</u>	<u>550</u>	<u>550</u>	<u>E</u>	<u>S</u>	<u>Fork</u>			
<u>4</u>	<u>20100101</u>	<u>29991231</u>								
<u>4</u>	<u>20100101</u>	<u>29991231</u>								
<u>Z</u>	<u>20100101</u>	<u>29991231</u>								

<u>L</u>	<u>M</u>	<u>N</u>	<u>O</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>
<u>Address Secondary (low)</u>	<u>Address Secondary (high)</u>	<u>Address Secondary (odd/even)</u>	<u>City Name</u>	<u>Zip Code</u>	<u>Plus 4</u>	<u>Zip Code Low</u>	<u>Zip Extension Low</u>	<u>Zip Code High</u>	<u>Zip Extension High</u>
			<u>Anywhere</u>	<u>84075</u>	<u>5545</u>				
			<u>Anywhere</u>	<u>84075</u>	<u>0550</u>				
						<u>84075</u>	<u>5545</u>	<u>84075</u>	<u>5545</u>
						<u>84075</u>	<u>0550</u>	<u>84075</u>	<u>0550</u>
						<u>84075</u>		<u>84075</u>	

<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>	<u>AA</u>	<u>AB</u>	<u>AC</u>	<u>AD</u>	<u>AE</u>	<u>AF</u>	<u>AG</u>	<u>AH</u>
<u>Composite SER code</u>	<u>FIPS State</u>	<u>FIPS State Indicator</u>	<u>FIPS County Code</u>	<u>FIPS Place Code</u>	<u>FIPS Place Class Code</u>	<u>Longitude Data</u>	<u>Latitude Data</u>	<u>Fuel MV</u>	<u>Fuel Aircraft</u>	<u>Fuel Locomotive</u>	<u>Fuel Watercraft</u>	<u>Electricity</u>
	<u>55</u>											
	<u>55</u>											
	<u>55</u>											
	<u>55</u>											
	<u>55</u>											

<u>AI</u>	<u>AJ</u>	<u>AK</u>	<u>AL</u>	<u>AM</u>	<u>AN</u>	<u>AO</u>	<u>AP</u>	<u>AQ</u>
<u>Piped natural Or artificial gas</u>	<u>Other fuels</u>	<u>Motor Vehicle</u>	<u>Aircraft</u>	<u>Watercraft</u>	<u>Modular Homes</u>	<u>Manufactured Homes</u>	<u>Energy Manufacturing</u>	<u>Food</u>
							<u>EM333</u>	
							<u>EM334</u>	
							<u>EM333</u>	
							<u>EM334</u>	
							<u>EM334</u>	

A state that has a single state rate for one of the allowed products and does not need to identify the sale by jurisdiction may provide an Alternate rate table similar to a state with a single tax rate using just the "Z" five-digit zip code information.

<u>A</u>	<u>B</u>	<u>C</u>	<u>D-Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>
<u>Record Type</u>	<u>Beginning Effective Date</u>	<u>Ending Effective Date</u>	<u>(leave blank)</u>	<u>Zip Code Low</u>	<u>Zip Extension Low</u>	<u>Zip Code High</u>	<u>Zip Extension High</u>
<u>Z</u>	<u>20100101</u>	<u>29991231</u>		<u>84075</u>		<u>84075</u>	

V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH
Composite SER code	FIPS State	FIPS State Indicator	FIPS County Code	FIPS Place Code	FIPS Place Class Code	Longitude Data	Latitude Data	Fuel MV	Fuel Aircraft	Fuel Locomotive	Fuel Watercraft	Electricity
	55											

AI	AJ	AK	AL	AM	AN	AO	AP	AQ
Piped natural artificial gas	Other fuels	Motor Vehicle	Aircraft	Watercraft	Modular Homes	Manufactured Homes	Energy	Food
							EM334	

VII. Rate Database Format

The Rate database contains the tax rate for each jurisdiction FIPS and Special Taxing District code used in the boundary database. These include the FIPS State Indicator Code, FIPS County code, FIPS Place Class Code, and Special Taxing District Code(s).

The rate database does not include Composite Codes. Composite codes are for reporting purposes only and are not used to determine the tax rates.

If the state provides an Alternate Boundary file, the State's Rate database will contain the tax rates for each code listed in the Alternate Boundary file. A separate rate file is not required.

Rates are shown as decimal fractions; e.g. a rate of 5% is shown as 0.0500.

- Do NOT store the percent sign (%) in the database. Rates are to be stored as numerical values only.

The rate database allows states to have two (2) state tax rates. The two state rates are for states that have a general state sales tax rate and a different state sales tax rate for food or drug sales. The seller uses the rate that applies to the goods being sold. All states must fill in each rate field for each jurisdiction for uniformity in processing.

Example of table for state that exempts Food/Drugs from state tax.

State	Jurisdiction Type	Jurisdiction FIPS Code	General Tax Rate – Intrastate	General Tax Rate – Interstate	Food/Drug Tax Rate – Intrastate	Food/Drug Tax Rate – Interstate	Begin Date	End Date
49	45	49	0.04875	0.04875	0.0000	0.0000	20040101	20041201
49	00	003	0.0100	0.0100	0.0100	0.0100	20040101	20041201
49	01	12345	0.0125	0.0125	0.0125	0.0125	20040101	20041201

The rate database also provides a tax rate for in-state (intrastate) sales vs. out-of-state (interstate) sales. The in-state (intrastate) vs. out-of-state (interstate) rates are provided for states that may allow for a

local tax on in-state sales but no local tax on sales originating out-of-state. All fields must be completed, even if the state has the same rates for in state and out-of-state sales.

Example of table for state that does not impose local tax on Interstate sales.

State	Jurisdiction Type	Jurisdiction FIPS Code	General Tax Rate – Intrastate	General Tax Rate – Interstate	Food/Drug Tax Rate – Intrastate	Food/Drug Tax Rate – Interstate	Begin Date	End Date
49	45	49	0.04875	0.04875	0.04875	0.04875	20040101	20041201
49	00	003	0.0100	0.0000	0.0100	0.0000	20040101	20041201
49	01	12345	0.0125	0.0000	0.0125	0.0000	20040101	20041201

A Rate file that includes rates from Alternate Boundary files will show the total tax for that code. Tax is reported for these items using that code. The state will be responsible for breaking the tax out to each jurisdiction covered under that code.

State	Jurisdiction Type	Jurisdiction FIPS Code	Gen Tax Intrastate	Gen Tax Interstate	Food/Drug Intrastate	Food/Drug Interstate
<u>55</u>	<u>45</u>	<u>55</u>	<u>5</u>	<u>5</u>		
<u>55</u>	<u>49</u>	<u>11223</u>	<u>1</u>	<u>1</u>		
<u>55</u>	<u>00</u>	<u>333</u>	<u>2</u>	<u>2</u>		
<u>55</u>	<u>01</u>	<u>22200</u>	<u>1</u>	<u>1</u>		
<u>55</u>	<u>79</u>	<u>EM333</u>	<u>7</u>	<u>7</u>		
<u>55</u>	<u>79</u>	<u>EM334</u>	<u>5</u>	<u>5</u>		

SSTGB Rate Table Data Matrix

Column	Field	Length	Type	Comment / Description
A	State	2	Char	
B	Jurisdiction Type	2	Char	Type of Taxing Authority Code X12 Data Element 1721
C	Jurisdiction FIPS code (or other state assigned special jurisdiction code)	2-5	Char	2 digits for State FIPS Codes 3 digits for County FIPS Codes 5 characters/digits for all other codes Leading zeros in must be included
D	General Tax Rate - Intrastate	1.5	Decimal	Always 0.nnnnn e.g. 0.05255 Do not include % sign

E	General Tax Rate - Interstate	1.5	Decimal	Always 0.nnnnn e.g. 0.05255 For jurisdictions other than the state: If the jurisdiction's tax is not imposed on sales originating out of state, enter "0" in columns E and G. If tax is imposed the same, enter the same tax rates in columns D,E,F, and G
F	Food/Drug Tax Rate - Intrastate	1.5	Decimal	Always 0.nnnnn e.g. 0.05255 If state does not have a lower sales tax rate for food/drugs, enter the general state sales tax rate in F and G (same as columns D and E)
G	Food/Drug Tax Rate - Interstate	1.5	Decimal	Always 0.nnnnn e.g. 0.05255
H	Effective Begin Date	8	Date	CCYYMMDD
I	Effective End Date	8	Date	CCYYMMDD

Rate Table Example

Header row is not included in the rate database.

A	B	C	D	E	F	G	H	I
State	Jurisdiction Type	Jurisdiction FIPS Code (or state assigned special jurisdiction code)	General Tax Rate – Intrastate	General Tax Rate – Interstate	Food / Drug Tax Rate – Intrastate	Food / Drug Tax Rate – Interstate	Begin Date	End Date
49	45	49	0.04875	0.04875	0.04875	0.04875	20040101	29991231
49	00	003	0.0100	0.0100	0.0100	0.0100	20040101	29991231
49	01	11111	0.0125	0.0125	0.0125	0.0125	20040101	29991231
49	63	22222	0.0200	0.0200	0.0200	0.0200	20100101	29991231

Rate CSV File

49,45,49,0.04875,0.04875,0.04875,0.04875,20040101,20040101
49,00,003,0.01,0.01,0.01,0.01,20040101,20040101
49,01,11111,0.0125,0.0125,0.0125,0.0125,20040101,20040101

VIII. Calculating Tax

In all instances, the computation of the tax amount is based on the individual rates using the rate for each code for that address or zip code from the Boundary file, whether the state is a "single" state or a "composite" state. This will ensure a common method for computing the tax.

Calculate tax for each FIPS Code (taxing jurisdiction) separately.

When using a state’s Alternate Boundary file, there will only be one code and one rate for each address or zip code. The tax is calculated and reported using that code and tax rate. The state is responsible for splitting the tax out to the appropriate jurisdictions.

IX. Using the Rate and Boundary Files

The rows in the boundary and rate databases are date dependent. Each query must ensure that the transaction date is within the beginning effective and ending effective dates on the row.

Each query must check for the Record type based on an address, 9-digit zip code or 5-digit zip code search.

The rate database allows states to have two (2) state tax rates. The two state rates are for states that have a general sales tax rate and a special rate for food or drug sales. The seller would use the rate that applied to the goods being purchased.

The rate database also provides a tax rate for in-state (intrastate) sales vs. out-of-state (interstate) sales. The in-state (intrastate) vs. out-of-state (interstate) rates are provided for states that allow a local tax on in-state sales but no local tax on sales originating out-of-state.

In the following examples the jurisdiction FIPS Code may include a state assigned special jurisdiction code.

Example 1. Address Level

The seller is determining the tax rates for: 1035 SW Simple Dr, Anywhere ST 84075-8944

Query the Boundary Database:

An address level query includes queries for the following:

- Record Type equal to “A” (address level)
- Transactions date falls within the Beginning Effective and Ending Effective Dates
- Each component of the address must be an exact match to that component in the table (may exclude the zip extension from the query)

To be a match at the “A” level, the address must match all address fields exactly as in the database. Exception, an address level query may exclude the zip extension field.

In this example the address is within the following “Address Range”.

NOTE: This is an abbreviated view of the data base row and does not contain allelements.

Record Type	Low Address Range	High Address Range	Odd / Even Range Indicator	Street Pre-Directional Abbr.	Street Name	Street Suffix Abbr	City Name	Zip Code	Plus 4	Zip Code Low	...	Composite SER code	FIPS State	FIPS State Indicator	FIPS County	FIPS Place
A	1000	2000	O	SW	Simple	DR	Anywhere	84075	5545				49	49	003	12345

The address matched in this database returns the following FIPS Codes:

- FIPS State Code = 49
- FIPS State Indicator Code = 49

- FIPS County Code = 003
- FIPS Place Code = 12345

Query the Rate Database:

A Rate Table query includes queries for the following:

- FIPS State Code – to ensure the rates are returned for the correct state
- Transaction date falls within the beginning effective and ending effective dates
- Each FIPS, Composite, or state assigned code to determine the rate for that jurisdiction

State	Jurisdiction Type	Jurisdiction FIPS Code	General Tax Rate – Intrastate	General Tax Rate – Interstate	Food/Drug Tax Rate – Intrastate	Food/Drug Tax Rate – Interstate	Begin Date	End Date
49	45	49	0.04875	0.04875	0.04875	0.04875	20040101	20041201
49	00	003	0.0100	0.0100	0,0100	0.0100	20040101	20041201
49	01	12345	0.0125	0.0125	0.0125	0.0125	20040101	20041201

The rates file returned the following rates:

- FIPS State Indicator Code 49: 0.04875
- FIPS County Code 003: 0.0100
- FIPS Place Code 12345: 0.0125

Example 2. 9-digit Zip Code Level Query

The seller is determining the tax rates for: 1035 SW Simple Dr, Anywhere ST 84075-8944

Query the Boundary Database:

A query for a 9-digit zip code includes queries for the following:

- Record Type equal “4” to ensure only returns from the 9-digit section of the database are searched. If this is not used and the state maintains address level data, the query may return multiple records (from address and 9-digit zip record).
- Transactions date falls within the Beginning Effective and Ending Effective Dates
- Zip high/low range the 5-digit zip falls within
- Zip Extension high/low range the +4 falls within

The query for this address returns the following record:

NOTE: This is an abbreviated view of the data base row and does not contain allelements.

Record Type	Beginning Effective Date	Ending Effective Date	Low Address Range	... City Name	Zip Code	Plus 4	Zip Code Low	Zip Ext Low	Zip Code High	Zip Ext High	Composite SER code	FIPS State	FIPS State Indicator	FIPS County	FIPS Place
4	20100101	29991231					84075	0001	84076	9999		49	49	003	12345

The 9-digit zip code (84075-8944) from this database returns:

- FIPS State Code: 49
- FIPS State Indicator Code: 49
- FIPS County Code: 003
- FIPS Place Code: 12345

Query the Rate Database:

A Rate Table query includes queries for the following:

- FIPS State Code – to ensure the rates are returned for the correct state
- Transaction date falls within the beginning effective and ending effective dates
- Each FIPS, Composite, or state assigned code to determine the rate for that jurisdiction

State	Jurisdiction Type	Jurisdiction FIPS Code	General Tax Rate – Intrastate	General Tax Rate – Interstate	Food/Drug Tax Rate – Intrastate	Food/Drug Tax Rate – Interstate	Begin Date	End Date
49	45	49	0.04875	0.04875	0.04875	0.04875	20040101	20041201
49	00	003	0.0100	0.0100	0.0100	0.0100	20040101	20041201
49	01	12345	0.0125	0.0125	0.0125	0.0125	20040101	20041201

The rates file returned the following rates:

- FIPS State Indicator Code 49: 0.04875
- FIPS County Code 003: 0.0100
- FIPS Place Code 12345: 0.0125

Example 3. 5-digit Zip Code Level Query

The seller is determining the tax rates for: 1035 SW Simple Dr, Anywhere ST 84075-8944

If no match was found at the Address or 9-digit zip code level. The database is queried at the 5-digit zip code level using zip code 84075.

Query the Boundary Database:

A query for a 5-digit zip code includes queries for the following:

- Record Type equal to “Z”
- Transactions date falls within the Beginning Effective and Ending Effective Dates
- Zip high/low range the 5-digit zip falls within

The database may return rows that look like either of the following:

NOTE: This is an abbreviated view of the data base row and does not contain allelements.

Record Type	Beginning Effective Date	Ending Effective Date	Low Address Range	...	City Name	Zip Code	Plus 4	Zip Low	Zip Ext Low	Zip High	Zip Ext High	Composite SER code	FIPS State	FIPS State Indicator	FIPS County	FIPS Place
Z	20100101	29991231						84075		84075			49	49	003	

Record Type	Beginning Effective Date	Ending Effective Date	Low Address Range	...	City Name	Zip Code	Plus 4	Zip Low	Zip Ext Low	Zip High	Zip Ext High	Composite SER code	FIPS State	FIPS State Indicator	FIPS County	FIPS Place
Z	20100101	29991231						84070		84099			49	49	003	

In the first database row, the zip code is an exact match. In the second example, the value 84075 is within the range 84070<-> 84099. In either instance, this database returns the following FIPS codes.

- FIPS State Code: 49
- FIPS State Indicator: 49
- FIPS County Code: 003

No Place code is included on the data row. Because the five-digit zip code is valid both within the city (with local jurisdiction tax) and outside the city (without local jurisdiction tax), the lowest jurisdictional tax rate must be applied, which in this example is no local jurisdiction tax.

Query the Rate Database:

A Rate Table query includes queries for the following:

- FIPS State Code – to ensure the rates are returned for the correct state
- Transaction date falls within the beginning effective and ending effective dates
- Each FIPS, Composite, or state assigned code to determine the rate for that jurisdiction

State	Jurisdiction Type	Jurisdiction FIPS Code	General Tax Rate – Intrastate	General Tax Rate – Interstate	Food/Drug Tax Rate – Intrastate	Food/Drug Tax Rate – Interstate	Begin Date	End Date
49	45	49	0.04875	0.04875	0.04875	0.04875	20040101	20041201
49	00	003	0.0100	0.0100	0,0100	0.0100	20040101	20041201
49	01	12345	0.0125	0.0125	0.0125	0.0125	20040101	20041201

The rates file returned the following rates:

- FIPS State Indicator Code 49: 0.04875
- FIPS County Code 003: 0.0100

Example 4. Composite SER Code

States have the option to require sellers or CSP to report tax amounts on the SER in a combined or composite amount. The state will indicate use of a composite amount by including a Composite SER code in the boundary file at each level, address, 9 or 5-digit zip code.

The following example is of the boundary database in which the state has provided a Composite SER Code of 98765 for the zip code range 84075-0001 through 84076-9999.

NOTE: This is an abbreviated view of the data base row and does not contain allelements.

Record Type	Beginning Effective Date	Ending Effective Date	Low Address Range	...	City Name	Zip Code	Plus 4	Zip Low	Zip Ext Low	Zip High	Zip Ext High	Composite SER code	FIPS State	FIPS State Indicator	FIPS County	FIPS Place
4	20100101	29991231						84075	0001	84076	9999	98765	49	49	003	12345

A 9-digit zip code (84075-8944) query in this database returns the following FIPS and Composite SER codes:

- FIPS State Code = 49
- FIPS State Indicator = 49
- FIPS County Code = 003

- FIPS Place Code = 12345
- Composite SER Code = 98765

Query the Rate Database:

A Rate Table query includes queries for the following:

- FIPS State Code – to ensure the rates are returned for the correct state
- Transaction date falls within the beginning effective and ending effective dates
- Each FIPS, Composite, or state assigned code to determine the rate for that jurisdiction

State	Jurisdiction Type	Jurisdiction FIPS Code	General Tax Rate – Intrastate	General Tax Rate – Interstate	Food/Drug Tax Rate – Intrastate	Food/Drug Tax Rate – Interstate	Begin Date	End Date
49	45	49	0.04875	0.04875	0.04875	0.04875	20040101	20041201
49	00	003	0.0100	0.0100	0.0100	0.0100	20040101	20041201
49	01	12345	0.0125	0.0125	0.0125	0.0125	20040101	20041201

The rates file returned the following rates:

- FIPS State Indicator Code 49: 0.04875
- FIPS County Code 003: 0.0100
- FIPS Place Code 12345: 0.0125
- Compute the tax amount for each jurisdiction
- Sum the tax amounts for all jurisdictions
- Reports the total tax for this transaction on the SER under the jurisdictions using the Composite code of 98765. (Tax reported under this code includes the total tax for all transactions that fall under this code during that reporting period.)

X. SER Examples

This example shows how tax is calculated and reported on a \$1000 taxable purchase for a Composite state and a state that is not a Composite State.

Calculate tax for each code:

CODE	Tax Rate	Tax
FIPS State Code 49	Identifies State	
FIPS State Indicator 49	0.04875	48.75
FIPS County Code 003	0.0100	10.00
FIPS Place Code 12345	0.0125	12.50
Composite SER Code 98765	Used for Reporting Only	
TOTAL TAX		71.25

Without a Composite code, report state tax and each jurisdiction tax under the each FIPS or state assigned special jurisdiction code.

SER Fields		
------------	--	--

Total Sales	1000.00	
Exemptions Deductions	0.00	
Taxable Sales	1000.00	
State Tax Due Sales In State	48.75	
State Tax Due Sales Orig Out of State	0.00	
State Tax Due Own Purch Withdraw	0.00	
State Tax Due Food Drug		
Jurisdiction Detail Fields		
Jurisdiction Code	Juris Tax Due Sales in State	Juris Tax Due Sales Orig Out of State
003	10.00	0.00
12345	12.50	0.00

With a Composite code report the total sales and deductions, but do not report state tax due. Report the total tax due (including the state tax) using the Composite [state assigned](#) FIPS code.

Do not report using each jurisdictions FIPS codes.

SER Fields		
Total Sales	1000.00	
Exemptions Deductions	0.00	
Taxable Sales	1000.00	
State Tax Due Sales In State	0.00	
State Tax Due Sales Orig Out of State	0.00	
State Tax Due Own Purch Withdraw	0.00	
State Tax Due Food Drug		
Jurisdiction Detail fields		
Jurisdiction Code	Juris Tax Due Sales in State	Juris Tax Due Sales Orig Out of State
98765	71.25	

Using a State's Alternate Boundary file

If the state provides an Alternative Boundary file and identifies the products to which the information on that file applies, the same process is used to determine the tax codes and rates using this file as is done with the State Boundary file.

Example:

A sale of Energy is delivered to Address with 9-digit zip code 84075-5545 on 2021-01-10. Because the state identifies this as an item subject to the Alternate Rate, the Alternate Boundary file is used to determine the tax code for the sale of energy.

This sale results in Code EM333

<u>A</u>	<u>B</u>	<u>C</u>	<u>...</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>W</u>	<u>...</u>	<u>AP</u>
<u>Record Type</u>	<u>Beginning Effective Date</u>	<u>Ending Effective Date</u>		<u>Zip Code Low</u>	<u>Zip Extension Low</u>	<u>Zip Code High</u>	<u>Zip Extension High</u>	<u>FIPS State</u>		<u>Energy</u>
<u>A</u>	<u>20100101</u>	<u>29991231</u>						<u>55</u>		<u>EM333</u>
<u>A</u>	<u>20100101</u>	<u>29991231</u>						<u>55</u>		<u>EM334</u>
<u>4</u>	<u>20100101</u>	<u>29991231</u>		<u>84075</u>	<u>5545</u>	<u>84075</u>	<u>5545</u>	<u>55</u>		<u>EM333</u>
<u>4</u>	<u>20100101</u>	<u>29991231</u>		<u>84075</u>	<u>0550</u>	<u>84075</u>	<u>0550</u>	<u>55</u>		<u>EM334</u>
<u>Z</u>	<u>20100101</u>	<u>29991231</u>		<u>84075</u>		<u>84075</u>		<u>55</u>		<u>EM334</u>

Code EM333 returns a tax rate of 7% from the State Rate File

<u>State</u>	<u>Jurisdiction Type</u>	<u>Jurisdiction FIPS Code</u>	<u>Gen Tax Intrastate</u>	<u>Gen Tax Interstate</u>	<u>Food/Drug Intrastate</u>	<u>Food/Drug Interstate</u>
<u>55</u>	<u>45</u>	<u>55</u>	<u>5</u>	<u>5</u>		
<u>55</u>	<u>49</u>	<u>11223</u>	<u>1</u>	<u>1</u>		
<u>55</u>	<u>00</u>	<u>333</u>	<u>2</u>	<u>2</u>		
<u>55</u>	<u>01</u>	<u>22200</u>	<u>1</u>	<u>1</u>		
<u>55</u>	<u>79</u>	<u>EM333</u>	<u>7</u>	<u>7</u>		
<u>55</u>	<u>79</u>	<u>EM334</u>	<u>5</u>	<u>5</u>		

Reporting of items subject to the Alternate Boundary File.

Include the sale in the Total Sales.

Deduct this amount under Exemptions Deductions.

Report the sale under the Jurisdiction Detail using the Code from the Alternate Boundary File.

Example

\$1000 in other taxable sales (subject to 5% state tax (code 55) and 1% local tax (code 11223))

\$500 in Energy (subject to 7% tax (Code EM333- from Alternate Boundary file))

SER Fields		
Total Sales	1500.00	
Exemptions Deductions	500.00	
Taxable Sales	1000.00	
State Tax Due Sales In State	50.00	
State Tax Due Sales Orig Out of State	0.00	
State Tax Due Own Purch Withdraw	0.00	
State Tax Due Food Drug		
Jurisdiction Detail Fields		

Jurisdiction Code	Juris Tax Due Sales in State	Juris Tax Due Sales Orig Out of State
11223	10.00	
EM333	35.00	
Total Tax Due		\$95.00

Chapter 13 Communications Technology: Registration

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Each state must implement technology to receive electronic registrations from the Streamlined Registration system. Each state must determine the communications technology best suited to its technology architecture and implement the infrastructure to support its chosen option.

Streamlined Registration

Azavar hosts the SSTRS and makes registration data available to the participating states using SOAP enveloping and the Registration schemas discussed in Chapter 12.

State Access to SSTRS

Each Streamlined Full, Associate, and Contingent Member state has direct access to their SSTRS state administration page. The state has an assigned administrator. The Administrator can add and delete users as needed by that state. Each administrator and user have a unique user ID and password.

- SST Testing Central will create an administrator’s account for the state. The administrator for that state may create user accounts as needed.
- States using webservices cannot use the ADMIN user for the webservice, they will need to create a separate user for that process.
- States should cancel accounts for users that leave or no longer need access to this system.
- Usernames cannot be changed. Emails and passwords can be changed.
- Forgotten Password: Contact SST Testing Central to obtain a new password. Passwords and security questions may be changed when the user logs in.

This site allows states to Query Registrations.

States may query SST registrations based on type of field and may search for any seller that is or was registered in that state.

1. Select Field search is based on.

2. Enter the field data in the 2nd box. This must be entered *exactly* as it is in the system.

The **Wildcard character is “%”**.

Example: if you know the business name (legal name) includes “Jones” but you do not know how it starts or ends, enter %Jones%

To query all records, just use “%” in the search box.

3. Select if you want active, inactive, or either (This will check for *SSTIDs that are active or inactive, not the specific state’s registration status*) Typically you should select “either”.

The Active column will display a ✓ for active accounts (SSTID) and a X for accounts that are canceled.

You may see an account that shows they have an active SSTID (✓) but the registration for you state is canceled. You will need to review the Extract to check the “Is Registered” field and the “Last Sales Date”

Foreign Id	Business Name	First Name	Last Name	Service Provider	Active

field. If the registration for your state is canceled the “is registered field” will show False and there will be a last sales date.

If the SSTID is inactive (X) all states are canceled. For an Inactive SSTID, the Is Registered field will stay as it was prior to the SSTID being canceled. If the account was canceled in your state prior to the SSTID being canceled, the “Is Registered” field will be False and there will be a last sales date. If there is no last sales date, the cancel date is the Unregistered or Out of Business date.

Examples:

Query for all Active Accounts (Active SSTIDs). This pulls in all accounts with active SSTIDs in the SSTRS that are currently or were previously registered in your state. You will not see accounts that were not registered in your state.

Active: ✓ means active SSTID or Registration account; ✗ means inactive or canceled account

Export Query results to Excel

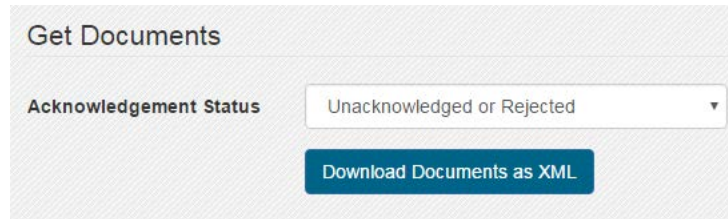
The export will contain all current information from the account, except the password.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q			
SSTID	FEIN	SSN	Foreign Id	EntityType	Legal Name First	Legal Name Middle	Legal Name Last	Legal Name Suffix	Business Name	DBAName	BusinessAddress1	BusinessAddress2	Business City	Business State Or Province	Business Postal Code	Business Country			
S00068741		504556666		Sole proprietor	Jody		B			Testing for NC	445 E CAPITOL AVE		Pierre	SD	57501	US			
R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH			
MailingAddress1	Mailing Address2	Mailing City	Mailing State Or Province	Mailing Postal Code	Mailing Country	Contact Name First	Contact Name Middle	Contact Name Last	Contact Name Suffix	ContactEmail	ContactPhone	Contact Phone Extension	BusinessPhone	BusinessPhoneExt	NACIS	State Of Organization			
445 E CAPITOL AVE		Pierre	SD	57501	US	Jody		B		jody.bartels@	(555) 555-5555		(555) 555-5555		123123	SD			
AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB
Model Type	Service Provider Id	Service Provider Name	CSP End Date	CSP Last Filing Period	Unregistered Date	Out Of Business Date	CreateDate	Effective Date	Registration Status	Registration Indicator	Is Registered	South Dakota Previously Registered	South Dakota Has Sales	South Dakota Volunteering Status	South Dakota Remote Seller	South Dakota First Sales Date	South Dakota Filing Period	South Dakota Last Sales Date	South Dakota Keep Account Open
None							20161130	20161130	Active	R	True	False	True	Undetermined	False	20161130	201611		

If the account had an active SSTID but was canceled in your state, you would see the following information: Column AT would read False; Column BA would have a date.

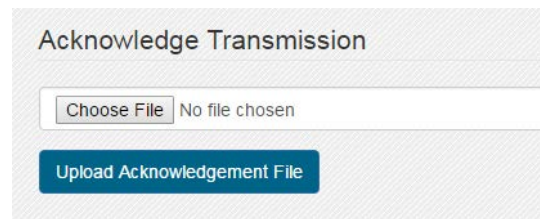
2. Get Documents

Use Get Documents to request download of RegNew and RegCou documents as XML. States can request documents based on the acknowledgement status. If the state selects Unacknowledged or Rejected, it will receive all changes that were made since its last request and all changes prior that were either Unacknowledged or Rejected by their system. The default transaction under a web services method should be Get Unacknowledged.



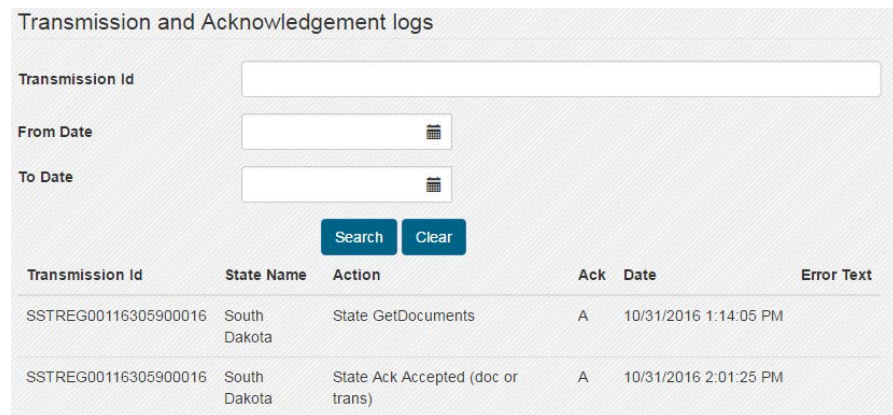
3. Acknowledge Transmissions and Documents

Once documents are requested, states will acknowledge the transmission. If this is not done, the next Get Document request will pull in all transmissions that were not acknowledged. If the state acknowledges the transmission but does not acknowledge or accept the individual documents, the next transmission will include all previously pulled documents that were not acknowledged.



4. Transmission Logs

States can Search prior transmission logs.



Transmission Id	State Name	Action	Ack	Date	Error Text
SSTREG00116305900016	South Dakota	State GetDocuments	A	10/31/2016 1:14:05 PM	
SSTREG00116305900016	South Dakota	State Ack Accepted (doc or trans)	A	10/31/2016 2:01:25 PM	

Obtaining Data from SSTRS

There are two methods to obtain data from the SSTRS

Recommended Communication Method is the use of web services. The SSTRS provides a web service to “push” the SOAP message to the state. The state in turn must implement a web service client to log onto the host and receive the message. The web service client WSDL (web services definition language) to be used is posted on Azavar’s web site <https://github.com/azavar/SST-API> for the states to adapt for their use. The HTTP/S protocol will be used underlying the web service, with SSL (secure sockets layer) encryption to protect seller data.

The URL for Testing and Production for the webservice may be obtained from SST Testing Central. State and CSPs use the same URL.

Alternate Method to receive registration data is for the state to “pull” the SOAP message from the SSTRS host website using secure HTTP/S download. The state will log onto the SSTRS website where registration files for that state are available for download. Again, SSL will be used.

PROCESSING Order for Registration Documents

A Transmission may include multiple documents for the same SSTID. These documents will show in date order (based on date submitted) with the oldest listed first. It is important to process the documents in this order.

A seller may register an account on 1/10/2020, Make an address change on 1/11/2020, Cancel that state’s registration on 1/11/2020 (but keep the SSTID active), then reregister for that state on 1/15/2020.

Depending on how frequent a state pulls and acknowledges documents the state may see the following documents for that SSTID in a single transmission.

1. RegNew (new Registration on 1/10/2020)
2. RegCou, Action Code C (Address update on 1/11/2020)
3. RegCou, Action Code U (canceled that state on 1/11/2020)
4. RegNew (reregister [new registration] on 1/15/2020)

If the state acknowledges a newer document first, they will not be able to correctly acknowledge an older document.

Get Documents (taken from GitHub 4-15-2021)

[SST-API/State web services description.docx at master · Azavar/SST-API \(github.com\)](#)

Purpose

To enable states to pull actionable items (new registrations/updates) from SST registration system, each item is called a Document and has a unique DocumentId

How it works

When a state sends a GetDocuments request they provide an “AcknowledgementStatus” code which can be

- Unacknowledged (“U”): This means that the state is asking for documents they didn’t acknowledge yet or they rejected. A document will stay unacknowledged until the state acknowledges it (explicitly or implicitly) by including the document in an AcknowledgeTransmission call. **If a registration (SSTID) has more than one unacknowledged document (with the same action code) the system will only respond with the most recent one (see examples).**
- Acknowledged (“A”): This will return the most recent acknowledged documents per registration (SSTID) and ActionCode regardless of whether there are newer unacknowledged/rejected documents.
- Rejected (“R”): This will return the most recent rejected documents per registration (SSTID) and ActionCode regardless of whether there are newer unacknowledged documents.
- All (“Z”): This will return the most recent documents per registration (SSTID) and ActionCode regardless of their acknowledgement status.

Rules

- R1. Calling GetDocuments for unacknowledged or all documents will keep returning the document (or a more recent one) if it wasn’t acknowledged/rejected by calling AcknowledgeTransmission
- R2. A registration (SSTID) can have up to 3 documents within a single transmission (GetDocuments call), each with a different ActionCode (N, C, and O or U). The state may need to examine the effective date to understand the chronological order of actions. (Beginning February 2019, because a seller may reregister

in a state under the same SSTID, there may be multiple documents within a single transmission if the state is not up to date on acknowledging documents. Documents must be processed in the proper order.)

AcknowledgeTransmission

Purpose

To inform SST registration system that the state acknowledges/rejects a transmission.

How it works

The state can send an AcknowledgeTransmission request providing how they want to respond to the transmission/document by either acknowledging it using “A” or rejecting it using “R” (with reason(s) expressed as a list of errors).

- Acknowledging a transmission means that it was received and the header is valid
- Acknowledging a document means that it was received and processed

Acknowledging or rejecting a transmission/document will not affect data within SST but it will allow SSTGB and the state to keep track of how their systems are synced.

Rules

- R3. Acknowledging/rejecting a document will fail if there is a more recent acknowledged/rejected document with the same SSTPID
- R4. Acknowledging/rejecting a document will fail if there is an older unacknowledged or rejected document with the same SSTPID and ActionCode = N (this rule supersedes R5)
- R5. Acknowledging a document (with “A”) will implicitly acknowledge (with “A”) all older documents that have the same SSTPID (except for the case in R4)
- R6. Rejecting a document (with “R”) will not affect other documents, but this can be changed to “A” if the document was implicitly acknowledged (with “A”) as R5 states

Examples

Examples are concerned with all documents for a single SSTPID

Case1

SST Status:

<u>DocumentId</u>	<u>SSTPID</u>	<u>ActionCode</u>	<u>EffectiveDate</u>	<u>Acknowledgment Status</u>
<u>SSTREG00115335000001</u>	<u>S00002202</u>	<u>N</u>	<u>12/1/2015</u>	<u>U</u>
<u>SSTREG00115335000002</u>	<u>S00002202</u>	<u>C</u>	<u>12/1/2015</u>	<u>U</u>
<u>SSTREG00115336000066</u>	<u>S00002202</u>	<u>C</u>	<u>12/2/2015</u>	<u>U</u>
<u>SSTREG00115337000098</u>	<u>S00002202</u>	<u>U</u>	<u>12/3/2015</u>	<u>U</u>

Calling GetDocuments with “U” (unacknowledged) will return:

<u>DocumentId</u>	<u>SSTPID</u>	<u>ActionCode</u>	<u>EffectiveDate</u>
<u>SSTREG00115335000001</u>	<u>S00002202</u>	<u>N</u>	<u>12/1/2015</u>
<u>SSTREG00115336000066</u>	<u>S00002202</u>	<u>C</u>	<u>12/2/2015</u>
<u>SSTREG00115337000098</u>	<u>S00002202</u>	<u>U</u>	<u>12/3/2015</u>

Then the state sends an AcknowledgeTransmission request with “A” for SSTREG00115336000066, this will implicitly acknowledge SSTREG00115335000001 (R6) and SSTREG00115335000002 (R5)

SST Status:

<u>DocumentId</u>	<u>SSTPID</u>	<u>ActionCode</u>	<u>EffectiveDate</u>	<u>Acknowledgment Status</u>
<u>SSTREG00115335000001</u>	<u>S00002202</u>	<u>N</u>	<u>12/1/2015</u>	<u>A</u>
<u>SSTREG00115335000002</u>	<u>S00002202</u>	<u>C</u>	<u>12/1/2015</u>	<u>A</u>

SSTREG00115336000066	S00002202	C	12/2/2015	A
SSTREG00115337000098	S00002202	U	12/3/2015	U

Calling GetDocuments with "U" will return:

DocumentId	SSTPID	ActionCode	EffectiveDate
SSTREG00115337000098	S00002202	U	12/3/2015

Calling GetDocuments with "A" will return:

DocumentId	SSTPID	ActionCode	EffectiveDate
SSTREG00115335000001	S00002202	N	12/1/2015
SSTREG00115336000066	S00002202	C	12/2/2015

Case2

SST Status:

DocumentId	SSTPID	ActionCode	EffectiveDate	Acknowledgment Status
SSTREG00115335000001	S00002202	N	12/1/2015	U
SSTREG00115335000002	S00002202	C	12/1/2015	U
SSTREG00115336000066	S00002202	C	12/2/2015	U
SSTREG00115337000112	S00002202	C	12/3/2015	U
SSTREG00115338000205	S00002202	C	12/4/2015	U
SSTREG00115338000667	S00002202	O	12/4/2015	U

Calling GetDocuments with "U" will return:

DocumentId	SSTPID	ActionCode	EffectiveDate
SSTREG00115335000001	S00002202	N	12/1/2015
SSTREG00115338000205	S00002202	C	12/4/2015
SSTREG00115338000667	S00002202	O	12/4/2015

Then the state sends an AcknowledgeTransmission request with "R" for [SSTREG00115338000205](#)

SST Status:

DocumentId	SSTPID	ActionCode	EffectiveDate	Acknowledgment Status
SSTREG00115335000001	S00002202	N	12/1/2015	U
SSTREG00115335000002	S00002202	C	12/1/2015	U
SSTREG00115336000066	S00002202	C	12/2/2015	U
SSTREG00115337000112	S00002202	C	12/3/2015	U
SSTREG00115338000205	S00002202	C	12/4/2015	R
SSTREG00115338000667	S00002202	O	12/4/2015	U

Calling GetDocuments with "U" will return:

DocumentId	SSTPID	ActionCode	EffectiveDate
SSTREG00115335000001	S00002202	N	12/1/2015
SSTREG00115338000205	S00002202	C	12/4/2015
SSTREG00115338000667	S00002202	O	12/4/2015

Calling GetDocuments with "R" will return:

DocumentId	SSTPID	ActionCode	EffectiveDate
SSTREG00115338000205	S00002202	C	12/4/2015

Then the state sends an AcknowledgeTransmission request with "A" for SSTREG0011533500001, the request will fail (R3)

Then the state sends an AcknowledgeTransmission request with "A" for SSTREG00115338000205, this will implicitly acknowledge SSTREG0011533500001 (R5), SSTREG0011533500002 (R5), SSTREG00115336000066 (R5), SSTREG00115337000112 (R5)

SST Status:

<u>DocumentId</u>	<u>SSTPID</u>	<u>ActionCode</u>	<u>EffectiveDate</u>	<u>Acknowledgment Status</u>
<u>SSTREG0011533500001</u>	<u>S00002202</u>	<u>N</u>	<u>12/1/2015</u>	<u>A</u>
<u>SSTREG0011533500002</u>	<u>S00002202</u>	<u>C</u>	<u>12/1/2015</u>	<u>A</u>
<u>SSTREG00115336000066</u>	<u>S00002202</u>	<u>C</u>	<u>12/2/2015</u>	<u>A</u>
<u>SSTREG00115337000112</u>	<u>S00002202</u>	<u>C</u>	<u>12/3/2015</u>	<u>A</u>
<u>SSTREG00115338000205</u>	<u>S00002202</u>	<u>C</u>	<u>12/4/2015</u>	<u>A</u>
<u>SSTREG00115338000667</u>	<u>S00002202</u>	<u>O</u>	<u>12/4/2015</u>	<u>U</u>

Calling GetDocuments with "U" will return:

<u>DocumentId</u>	<u>SSTPID</u>	<u>ActionCode</u>	<u>EffectiveDate</u>
<u>SSTREG00115338000667</u>	<u>S00002202</u>	<u>O</u>	<u>12/4/2015</u>

Calling GetDocuments with "A" will return:

<u>DocumentId</u>	<u>SSTPID</u>	<u>ActionCode</u>	<u>EffectiveDate</u>
<u>SSTREG0011533500001</u>	<u>S00002202</u>	<u>N</u>	<u>12/1/2015</u>
<u>SSTREG00115338000205</u>	<u>S00002202</u>	<u>C</u>	<u>12/4/2015</u>

Calling GetDocuments with "R" will return no documents for SSTPID S00002202