

**Streamlined Sales Tax Project**  
**Rates and Boundary Databases Instructional Paper (August, 2005)**

I. Overview .....	2
II. Summary of state requirements .....	2
III. Summary of Agreement Language .....	3
1. Local Rate and Boundary Databases - Section 305 .....	3
2. Provide and maintain a database or web page describing local rate and boundary changes that include all jurisdictions, descriptions, and effective date of change - Section 304. ....	4
3. Participate with other states in the development of an address-based system - Section 305G. ....	4
4. State Rate Changes - Section 304 .....	5
5. Effective Date for Rate Changes -Section 329 .....	5
6. Relief from Certain Liability - Section 306 .....	5
7. Databases Requirements and Exceptions - Section 307 .....	5
Appendix A .....	6
Streamlined Sales Tax Agreement Language .....	6
Section 304 : NOTICE FOR STATE TAX CHANGES .....	6
Section 305 : LOCALRATE AND BOUNDARY CHANGES .....	6
Section 306 : RELIEF FROM CERTAIN LIABILITY .....	7
Section 307 : DATABASE REQUIREMENTS AND EXCEPTIONS .....	7
Section 329 : EFFECTIVE DATE FOR RATE CHANGES .....	7
Appendix B .....	8
Rate and Boundary Tables Technical Directions .....	8
Boundary Table .....	8
Examples of the Boundary Table .....	9
Appendix C .....	15
SSTP Boundary Table .....	15
Appendix D .....	16
SSTP Rate Table .....	16

Appendix E – Data Matrix ..... 17

Appendix F ..... 20

SER Examples ..... 20

Appendix G ..... 21

CSV File Examples

Appendix H

Web Services

## **I. Overview**

The Streamlined Sales Tax Agreement includes several requirements related to state and local government sales and use tax rates and boundaries. These requirements generally fall into two categories. First, states are required to develop and maintain databases that will provide retailers information on what rate to charge for any delivery location in the state. Second, restrictions are placed on how rates are used (for example, limiting how frequently rates can be changed). This paper describes a state's responsibility in this area.

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.

To assure uniformity, the Agreement requires that the databases be available in common formats which are to be approved by the Governing Board. These formats have been developed in consultation with the TIGERS Group (an electronic filing standards committee for government business) and with technology providers and retailers.

The information contained within this paper applies to destination based sourced sales. The discussion on the SSTP rate and boundary tables are intended for usage in determining the proper taxing jurisdiction for sales which are delivered to the purchaser's address. Over-the-counter sales are not included within the scope of this paper. Additionally, retail sales or transfer of motor vehicles, aircraft, watercraft, modular homes, manufactured homes, or mobile homes (as provided for in Section 302) and sales or use taxes levied on electricity piped natural or artificial gas, or other heating fuels (as provided for in Section 308) are not included within the scope of this paper.

## **II. Summary of state requirements**

The Agreement requires states to develop and maintain the following rates and boundary databases or tables to be in compliance with the Agreement. Each state is responsible for making this information available on their website. In the future, it may be that information for all member states will be housed at a single location. The following requirements must be met:

Boundary Changes (Section 305D) Provide and maintain a database that describes boundary changes for all taxing jurisdictions. This list, published on the state's website will provide one location per state to review all changes that impact sales and use taxes within the state. This includes:

- Tax rates changes

- Address boundary and zip code changes
- Changes must include a description and effective date of the changes

Boundary Database (Section 305F and 305 G) Provide and maintain a database that assigns each five digit and nine digit zip code within a member state to the proper tax rates and jurisdictions. This database will be used to identify the taxing jurisdictions' Federal Information Processing Standards (FIPS) codes for accessing of the tax rate database.

- The assignment of all taxing jurisdictions within the state at the 9-digit Zip Code level (Zip + 4). These rows must have NULL values in the Street Name fields.

- The assignment of all taxing jurisdiction boundaries using the 5-digit Zip Code. These rows must have NULL values in the Zip Extension High & Low fields.

- The SSTP Boundary database data must be available on the state's website in a downloadable comma delimited or comma separated value (CSV) format.

- Taxing jurisdictions will be identified using the (FIPS) codes. An additional field will be added to the database to accommodate special taxing jurisdictions.

- The Agreement provides that states may develop an additional address level database that assigns addresses to taxing jurisdictions. If approved by the Governing Board, retailers will be required to use the address data instead of the 9-digit zip code (zip +4) data. The boundary database format being recommended by the TIGERS group is the same as the 9-digit and 5-digit zip code database and enables all of the data to be stored in one database. Maintaining the 9-digit zip code data is recommended for those occurrences in which the address record is not found. Without the 9-digit zip code records, the query would fall back to the 5-digit zip code.

- Accessing of the boundary data by address, 9-digit or 5-digit zip code requires following specific query instructions defined later in this paper.

#### Rates Database (Section 305E)

- Prepare data that will be used in a SSTP Rate database. Rates must be separated into the lowest level components, i.e. state, county, city, municipality, etc.

- The SSTP Rate database data must be available on the state's website in a downloadable comma delimited, comma separated value (CSV) format.

Appendixes B through F provide technical directions, database formats, and examples for the rates and boundary databases.

### III. Summary of Agreement Language

The following is a summary of the language in the Agreement. The complete language is contained in Appendix A.

#### 1. Local Rate and Boundary Databases - Section 305

- . • Provide and maintain a **rates and jurisdiction** database that associates rates to jurisdictions using the Federal Information Processing Standards (FIPS) codes, with extension for special taxing jurisdictions as needed.
- . • Provide and maintain a **rate** database that associates **Zip and Zip+4 to jurisdiction**.
- . • The format will be determined by the Governing Board. The TIGERS group recommends utilizing the attached format (Appendix C and D).
- . • 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.
- . • There is a rebuttable presumption that a seller has exercised due diligence if the seller has attempted to determine the nine digit zip code designation by utilizing software approved by the Governing Board that makes this designation from the street address and the five digit zip code of the purchaser.
- . • States have the option of having tax amounts reported on the simplified electronic return (SER) by individual taxing jurisdictions or as a combined amount. For combined states, a composite SER code will be used on the boundary database. When used it will inform the seller to combine the tax amounts and report on the SER using the composite SER code as the jurisdiction. The TIGERS group recommends utilizing the attached format.
- . • The tax rate database must provide the ability to handle two (2) state tax rates and local jurisdictions with an in-state sales tax but no tax on out-of-state sales. The database format has been developed to follow the SSTP Agreement requirements that are effective January 1, 2006. States using the database with more than two state tax rates prior to January 2006 will be required to supply query instructions on how to process the exceptions. All states will be required to complete each tax rate field for a jurisdiction to provide for uniformity of processing. The TIGERS group recommends utilizing the attached format.

2. Provide and maintain a database or web page describing local rate and boundary changes that include all jurisdictions, descriptions, and effective date of change - Section 304.

- . • Provide 60 days notice.
- . • Effective date of rate and boundary changes must be first day of calendar quarter.
- . • Rate changes on printed catalogs with published local rates are applicable with 120 days notice.

3. Participate with other states in the development of an address-based system - Section 305G.

- . • This system must meet the requirements developed by the Mobile Telecommunications Sourcing Act (MTSA.) The SSTP 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 or will develop an address-based system will also be required to 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-based system provided by that member state. If any member state develops an address-based assignment system pursuant to MTSA a seller may use that system in place of the system provided for in subsection (F) of this section, which is the zip+4 database.
- . • This section of the Agreement is being met with the proposed structure.

4. State Rate Changes - Section 304 Lessen the difficulties faced by sellers due to changes in state rates.

- . • 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.

5. Effective Date for Rate Changes - 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.

6. Relief from Certain Liability - 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 information.

7. Databases Requirements and Exceptions - Section 307

- . • Will be provided in a downloadable format.
- . • The provisions in Section 305 (F & G) do not apply when sales are made at the business location of a seller.
- . • The databases are not required by states prior to entering into the Agreement; the Governing Board will establish dates for availability and use of databases.

## Appendix A

### Streamlined Sales Tax Agreement Language Section 304: NOTICE FOR STATE TAX CHANGES

- A. Each member state shall lessen the difficulties faced by sellers when there is a change in a state sales or use tax rate or base by making a reasonable effort to do all of the following:
1. 1. Provide sellers with as much advance notice as practicable of a rate change.
  2. 2. Limit the effective date of a rate change to the first day of a calendar quarter.
  3. 3. Notify sellers of legislative changes in the tax base and amendments to sales and use tax rules and regulations.
- B. Failure of a seller to receive notice or failure of a member state to provide notice or limit the effective date of a rate change shall not relieve the seller of its obligation to collect sales or use taxes for that member state.

### Section 305: LOCAL RATE AND BOUNDARY CHANGES Each member state that has local jurisdictions that levy a sales or use tax shall:

- A. Provide that local rate changes will be effective only on the first day of a calendar quarter after a minimum of sixty days' notice to sellers.
- B. Apply local sales tax rate changes to purchases from printed catalogs wherein the purchaser computed the tax based upon local tax rates published in the catalog only on the first day of a calendar quarter after a minimum of one hundred twenty days' notice to sellers.
- C. For sales and use tax purposes only, apply local jurisdiction boundary changes only on the first day of a calendar quarter after a minimum of sixty days' notice to sellers.
- D. Provide and maintain a database that describes boundary changes for all taxing jurisdictions. This database shall include a description of the change and the effective date of the change for sales and use tax purposes.
- E. Provide and maintain a database of all sales and use tax rates for all of the jurisdictions levying taxes within the state. For the identification of states, counties, cities, and parishes, codes corresponding to the rates must be provided according to Federal Information Processing Standards (FIPS) as developed by the National Institute of Standards and Technology. For the identification of all other jurisdictions, codes corresponding to the rates must be in the format determined by the Governing Board.
- F. Provide and maintain a database that assigns each five digit and nine digit zip code within a member state to the proper tax rates and jurisdictions. The state



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. For the purposes of this section, there is a rebuttable presumption that a seller has exercised due diligence if the seller has attempted to determine the nine digit zip code designation by utilizing software approved by the Governing Board that makes this designation from the street address and the five digit zip code of the purchaser.

- G. Participate with other member states in the development of an address-based system for assigning taxing jurisdictions. The system must meet the requirements developed pursuant to the federal Mobile Telecommunications Sourcing Act (4

U.S.C. Sec. 119). 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. If any member state develops an address-based assignment system pursuant to the Mobile Telecommunications Sourcing Act, a seller may use that system in place of the system provided for in subsection (F) of this section.

**Section 306: RELIEF FROM CERTAIN LIABILITY** Each member state shall relieve sellers and CSPs from liability to the member state and local jurisdictions for having charged and collected the incorrect amount of sales or use tax resulting from the seller or CSP relying on erroneous data provided by a member state on tax rates, boundaries, or taxing jurisdiction assignments. A member state that provides an address-based system for assigning taxing jurisdictions pursuant to Section 305, subsection (G) or pursuant to the federal Mobile Telecommunications Sourcing Act will not be required to provide liability relief for errors resulting from the reliance on the information provided by the member state under the provisions of Section 305, subsection (F).

#### **Section 307: DATABASE REQUIREMENTS AND EXCEPTIONS**

- A. The electronic databases provided for in Section 305, subsections (D), (E), (F), and (G) shall be in a downloadable format approved by the Governing Board.
- B. The provisions of Section 305, subsections (F) and (G) do not apply when the purchased product is received by the purchaser at the business location of the seller.
- C. The databases provided by Section 305, subsections (D), (E), and (F) are not a requirement of a state prior to entering into the Agreement. The Governing Board shall establish the effective dates for availability and use of the databases.

**Section 329: EFFECTIVE DATE FOR RATE CHANGES** 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:

- A. For a rate increase, the new rate shall apply to the first billing period starting on or after the effective date.
- B. For a rate decrease, the new rate shall apply to bills rendered on or after the effective date.

## Appendix B

### Rate and Boundary Tables Technical Directions

The purpose of this section is to provide states and sellers a description of the SSTP Boundary and Rate Tables, instructions on how to populate the tables, and how the data is to be accessed. Some discussion is also provided for the Simplified Electronic Return (SER).

**Boundary Table** The boundary database has been designed to provide one database table for all boundary queries regardless of the level of detail that a state provides.

- All states must provide boundary data at the 9-digit zip code (zip + 4) level.
- States must also provide the appropriate 5-digit zip code boundaries to meet the requirement in 305(F).
- A state may choose to expand the database to also include address boundaries.

As defined by the SSTP, the boundary database must contain entries (data rows) that allow users to query the database with either a 9-digit zip code (zip + 4) (9 bytes) or a 5digit zip (5 bytes) code and return the FIPS codes that define the jurisdiction. The design of the boundary database has been developed for both zip code and address queries to be handled within the same database. Each row on the database must be unique for the query to return one record, depending on the data supplied to the query. Under this approach, sellers can use one set of query instructions that will work for any state, no matter the level of data on the database. 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 SSTP Boundary Table are:

- Record Type – A one-character indicator that is equal to “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
- Composite SER Code (5 bytes) - Code used to determine how to report tax amounts on the SER
- FIPS State Indicator – A copy of the state FIPS code used to indicate whether or

not state taxes apply to a record (data row) in the database.

Upon retrieving the FIPS codes from the boundary database, the user will access the rate database for the tax rate of the jurisdiction and the computation of the tax amounts.

Examples of the Boundary Table The following example illustrates the various ways states may develop the boundary database. Each of these entries is valid. An example of the boundary database entry is found in Appendix F. Although not included in the examples, the query to the database must begin by finding the correct row based on the effective date.

The seller has the following address that they need the tax rates:  
1035 SW Simple Dr, Anywhere ST 84075-8944

9-digit Zip Code Level Query All states must have the boundary database by 9-digit zip code. The database would contain the following data and the query would be using the 9-digit zip code against the database. **NOTE: This is an abbreviated view of the data base row and does not contain all elements.**

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
4									

Zip Low	Zip Ext Low	Zip High	Zip Ext High	FIPS State	FIPS State Indicator	FIPS County	FIPS Place	Composite SER code
84075	0000	84076	9999	49	49	003	12345	

The 9-digit zip code (84075-8944) is found within the row and the database returns:

- . • FIPS State Code = 49
- . • FIPS County Code = 003
- . • FIPS Place Code = 12345

When accessing the database with a 9-digit zip code, the query must include a check that the Record Type is equal to "4.". This is required to ensure the query only returns the specific 9-digit zip code record. If this check is not included, and a state also maintains address level data in the database, the query would return multiple records (those associated with an address and the 9-digit zip code records).

5-digit Zip Code Level If the vendor was unable to find the appropriate data row for the 9-digit zip code, they use the 5-digit code to query the database, including selection of a record whose Record Type is equal to "Z.". To enable the query by 5-digit zip code, a row must be created with only the 5-digit code and the extensions containing Null values. All states must develop data at the 5-digit zip code level to handle this exception process. Depending on the state, they may be able to have a range of 5-digit codes or they may need to have a row for each 5-digit code.

Customer provides a zip of 84075. Table row could look like either of the following:

Record Type	Zip Low	Zip Ext Low	Zip High	Zip Ext High	FIPS State	FIPS State Indicator	FIPS County	FIPS Place	Comp SER Code
Z	84075	NULL	84075	NULL	49	49	003		

**NOTE AGAIN THAT THIS IS AN ABBREVIATED VERSION OF THE TABLE ROW.**

Record Type	Zip Low	Zip Ext Low	Zip High	Zip Ext High	FIPS State	FIPS State Indicator	FIPS County	FIPS Place	Comp SER Code
Z	84075	NULL	84099	NULL	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 84075<-> 84099 In either instance, the database would return:

- . • FIPS State Code = 49
- . • FIPS County Code = 003

You will notice that no Place code is included on the data row. That is because the 5digit zip code is valid both within the city and outside the city and for the 5-digit zip code, the lowest jurisdictional tax rate must be applied.

Address Level States that developed the boundary database at an address level, the query would use the address to find the correct record. In this abbreviated example the address is within a street range. The record Type is equal to "A."

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
A	1000	2000	O	SW	Simple	DR	Anywhere	84075	5545

Zip Low	Zip Ext Low	Zip High	Zip Ext High	FIPS State	FIPS State Indicator	FIPS County	FIPS Place	Composite SER code
				49	49	003	12345	

b

The address is contained within this data row and the database returns:

- . • FIPS State Code = 49
- . • FIPS County Code = 003
- . • FIPS Place Code = 12345

Composite SER Code In the examples above, the states is a “single rate” state, meaning they want the tax reported on the SER by each taxing jurisdiction FIPS code. This is known because the Composite SER code is blank. If this were a “composite” state that wanted the tax amount reported until one code, there would be value in the Composite SER code.

States have the option of requiring the tax amounts on the SER to be reported in a combined or composite amount. 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 0000 through 84076-9999.

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
4									

Zip Low	Zip Ext Low	Zip High	Zip Ext High	FIPS State	FIPS State Indicator	FIPS County	FIPS Place	Composite SER code
84075	0000	84076	9999	49	49	003	12345	98765

The 9-digit zip code (84075-8944) is found within the row and the database returns:

- . • FIPS State Code = 49
- . • FIPS County Code = 003

- FIPS Place Code = 12345

Upon retrieving the FIPS codes, the seller would:

1. access the rate database for the individual tax rates for each of these jurisdictions
2. compute the tax amount for each, and
3. sum the tax amounts for reporting on the SER under the jurisdiction code of 98765.

When creating the SER data, the seller would create a state jurisdiction record for the code 49 with the tax amount of zero and a record for jurisdiction code 98765 with the total tax due amount. (The state jurisdiction record is necessary due to how the SER and the information return function.)

State FIPS Indicator The state FIPS code is a required field in each database row or record, because it is needed as part of the key into the state rate database. However, its presence implies that a state-level sales tax applies to the boundary row in question. This may not always be the case. In particular, some Indian tribal lands are not subject to state sales tax. The FIPS State Indicator field is used to indicate whether or not state sales and use tax is to be applied. If the FIPS State Indicator is not "00" then it must be equal to the State FIPS Code, and indicates that state sales and use tax does apply to the boundary record. If the State FIPS Indicator is equal to "00" values, then state sales and use tax does not apply to the boundary record.

Effective Dates Although not shown on the examples above, the first two fields on every record/row of the Boundary database are the Beginning Effective Date and the Ending Effective Date. When the database is initially created, all Beginning Effective Date fields should be equal to the date of creation. All Ending Effective Date fields should be set to a future date, such as "29991231." If a boundary record's data changes, for example, if a previously unincorporated area is annexed into a city, then a new boundary record is created. The Ending Effective Date of the original record is changed to equal the last date that the record is in effect, which equals the last date of a calendar quarter; the record is **not** deleted. The Beginning Effective Date of the new record is set to equal the first date that the record is effective, which equals the first day of the new calendar quarter. The Ending Effective Date is set to some time in the future, such as "29991231." This process does cause the boundary database to grow in size over time. However, the intent is to enable queries to prior period data, for purposes of an amended or delinquent return. In order to control the growth of the database, records over five years old may be purged to an archive file.

## SSTP Rates Table

The SSTP Rates database contains the tax rate for each jurisdiction code that is used on the boundary database. The FIPS state Code, FIPS County code, FIPS Place (Municipality) Number, FIPS Place Class Code, and the Special Taxing District from the boundary database are on the rates database under the field Jurisdiction FIPS code.

Access the rate database using the state FIPS code from the boundary database to locate correct state records. This is required as FIPS codes are not unique for all place and place class codes across all states. The Jurisdiction Type is provided for the seller's use, if they wish to note the type of tax being computed (state, city, county special, etc). This field must be populated by the state, using the codes from X12 Data Element 1721 given at the end of this paper. Remember, a query must also check that the correct row is accessed based on the beginning and ending effective date for the row, based on transaction date.

Using the FIPS codes from the Boundary Table, the seller queries the Rates Table for the tax rates. The rate database must be queried for each component of the FIPS codes retrieved from the boundary database. The tax due is computed for each taxing jurisdiction separately.

The rate database allows states to have two (2) state tax rates and a tax rate for in-state (intrastate) sales vs. out-of-state (interstate) sales. 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 purchases. The two state rates will be completed by all states for consistency in use. 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 not a tax on sales originating out-of-state. Again, all of the field will be completed, even if the state has the same rates for in-state and out-of-state sales.

Rates are to be provided as decimal fractions; e.g. a rate of 5% is to be provided as 0.0500. Do NOT store the percent sign (%) in the database. Rates are to be stored as numerical values only.

Using the earlier examples, the FIPS codes retrieved from the Boundary Table were:

1. FIPS State Code = 49
2. FIPS County Code = 003
3. FIPS Place Code = 12345

As you can see in the database, there are values in the Jurisdiction FIPS Code field that matches all of the FIPS components provided by the Boundary database. As with the Boundary Table, the query must check that the transaction date is within the beginning and end date of the record.



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

Single Rate States vs. Composite Rate State SSTP is providing a mechanism in which states can receive the tax amounts on the SER by individual taxing jurisdiction or by a composite SER code in which all of the tax amounts are reported under this composite code.

Single rate states are identified by the absence of a value in the Composite SER Code on the boundary database. The Seller, upon finding the Composite SER Code blank, would compute and report the tax amounts on the SER in its component parts. In the example, they would report tax for the state code of 49, the county code of 003 and the place code of 12345.

Composite rate states are identified by the finding of a value within the composite SER code. When a state provides a value in the Composite SER Code, the Seller would compute the tax based on the individual jurisdictions but report the tax amounts on the Simplified Electronic Return (SER) for the jurisdiction code listed in the Composite SER Code. Appendix B provides an example of the boundary database with the composite SER code. In this example, the seller will compute the tax for the state code of 49, county code of 003 and place code of 12345. The tax amounts are summed into one total and the vendor reports the tax on the SER using the composite code of 00554. A state record is still created for the SER for a composite state and the amounts would be zero.

#### Technical Aspects of the tables

1. The FIPS codes can be located on their home page [www.itl.nist.gov/fipspubs](http://www.itl.nist.gov/fipspubs)
2. The Jurisdiction FIPS Code are the FIPS codes from the boundary database for the state, county, and Place fields.
3. In developing the database, a 9-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.)
4. The format of the database is standard relational table. However, a copy of the database must be available for download from the state's website in comma

delimited or CSV format.

5. 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 is in compliance with MTSA, the state can populate the SSTP Boundary Table. Address records have Record Type equal to "A." The zip code low and high fields and the zip extension low and high fields are only populated for the 9-digit and 5-digit code rows. These fields would be null on address records. This will allow vendors to get the same FIPS results regardless of how they query the database. Additionally, these states must create data rows that allow query by just a 5-digit zip code and by just a 9-digit zip code. For the 5-digit zip code query, this would mean having Record Type equal to "Z" and NULL values in the Street name and the zip extension low and high. For the 9-digit zip code query, this would mean having Record Type equal to "4" and NULL values in the Street name.
6. All States will create 9-digit zip code rows that contain null values in the street name filed. 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. The jurisdictions that would be associated with this data row would be lowest rates for that 9-digit zip code.
7. All States will create 5-digit zip code rows that contain null values in the extension fields. These rows are used as a fall back when an address or 9-digit zip code cannot be found. The jurisdictions that would be associated with this data row would be lowest rates for that zip code or zip code range.
8. For both the boundary and rates database, the rows are date dependent. As part of the query, the query must ensure that the transaction date is within the begin and end dates on the rows, with the end date equal to a future data value for the current rate
9. In all instances, the computation of the tax amount is based on the individual rates, whether the state is a "single" state or a "composite" state. This will ensure a common method for computing the tax.
10. All fields on the rate database for a row will be completed by all states for consistency in database queries.
11. Composite states would have a state record on each SER but the tax amount would be zero. The state jurisdiction in the SER is required for the receipt of tax data on the informational return.
12. An address search may be performed using only the 5-digit zip code. The address record would contain the 9-digit zip code, but a search by 5-digit zip with the address is okay.

## Appendix C

### SSTP Boundary Table

Field	Length	Type	Comment / Description
Record Type	1	Char	"A" for Address level record, "Z" for five-digit Zip level record, or "4" for Zip+4 level record Added for SSTP
Beginning Effective Date	8	Date	Date in CCYYMMDD format
Ending Effective Date	8	Date	Date in CCYYMMDD format (If Record Type = PO Box, Box Range
Low Address Range	10	Char	Listed) (If Record Type = PO Box, Box Range
High Address Range	10	Char	Listed)
Odd / Even "Range" Indicator	1	Char	"O" for Odd, "E" for Even, or "B" for Both odd and even
Street Pre-Directional abbr.	2	Char	Primary Address (Address Line 1)
Street - Name	20	Char	Primary Address (Address Line 1)
Street - Suffix Abbr.	4	Char	Primary Address (Address Line 1)
Street - Post Directional	2	Char	Primary Address (Address Line 1) Secondary Address (Address Line 2) - if
Address Secondary Abbr.	4	Char	Highrise or Firm Secondary Address (Address Line 2) - if
Address Secondary (Low)	8	Char	Highrise or Firm Secondary Address (Address Line 2) - if
Address Secondary (High)	8	Char	Highrise or Firm
Address Secondary			Secondary Address (Address Line 2) - if
(Odd/Even)	1	Char	"O" (odd) "E" (even) "B" (Both)
City Name	28	Char	
Zip Code	5	Char	

Plus4	4	Char	
Zip Code Low	5	Char	Added for SSTP
Zip Extension Low	4	Char	Added for SSTP
Zip Code High	5	Char	Added for SSTP
Zip Extension High	4	Char	Added for SSTP
Composite SER Code	5	Char	Added for SSTP
FIPS State Code	2	Char	
FIPS State Indicator	2	Char	Copy of state FIPS code if state tax rate applies, "00" if state tax rate does not apply. Added for SSTP
FIPS County Code	3	Char	
FIPS Place Code	5	Char	Municipality, township, named unincorporated area, tribal land, etc.
FIPS Place Class Code	2	Char	
Longitude Data	7	Char	
Latitude Data	7	Char	
Special Tax District Code		Char	"VD" for Vendor Defined "ST" for state
Source (#1)	2		Defined
Special Tax District Code (#1)	5	Char	This is the actual code from the source
Type of Taxing Authority		Char	
Code (#1)	2		From X12 Data Element 1721
:		Char	
Special Tax District Code		Char	
Source (#20)	2		
Special Tax District Code (#20)	5	Char	
Type of Taxing Authority		Char	
Code (#20)	2		

## Appendix D

### SSTP Rate Table

Field	Length	Type	Comment / Description
State	2	Char	
Jurisdiction Type	2	Char	X12 Data Element 1721
Jurisdiction FIPS code	5	Char	
General Tax Rate - Intrastate	1.5	Decimal	Always 0.nnn e.g. 0.0525
General Tax Rate - Interstate	1.5	Decimal	
Food/Drug Tax Rate - Intrastate	1.5	Decimal	
Food/Drug Tax Rate - Interstate	1.5	Decimal	
Effective Begin Date	8	Date	CCYYMMDD
Effective End Date	8	Date	CCYYMMDD

STA – State, CTY – County, CIT – City & 3 Char STJ – Special Taxing Jurisdiction 5

## Appendix E – Data Matrix

Field Name	Length	Type	Address Level	9-Digit-Zip Level	5-Digit-Zip Level	Comment/Descriptions	Examples
Record Type	1	Char	Must equal "A"	Must equal "4"	Must equal "Z"	Indicates format of record	A – Address "4" – Zip+4 "Z" – Zip
Beginning Effective Date	8	Date	Required	Required	Required	Date in CCYYMMDD format. Indicates the beginning date the table should be used to retrieve address boundary data.	20040101
						Date in CCYYMMDD format. Indicates the last	

Ending Effective Date	8	Date	Required	Required	Required	date the table should be used to retrieve address boundary data.	20040331
Low Address Range	10	Char	Required	Null	Null	This field can be used for two types of address data. For addresses that have a PO Box number or a range of PO Box 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 Example: PO Box 1234, Pierre SD Street Example: 816 N Main ST, Pierre SD
High Address Range	10	Char	Required	Null	Null	This field can be used for two types of address data. For addresses that have a PO Box number or a range of PO Box 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 Example: PO Box 1234, Pierre SD Street Example: 816 N Main ST, Pierre SD
Odd/Even Indicator	1	Char	Dependent	Null	Null	If the address record is a PO Box Type, then the field should be null else it should indicate if the given range of address(s) is odd or even.	O - Odd E - Even B - Both

Street Pre-Directional	2	Char	Type Dependent	Null	Null	If the address record is a PO Box type, then this field should be null else it should have a value if Street Post Direction does not have a value.	N,S,E,W, NE,NW, SE,SW
Street Name	20	Char	Required	Null	Null	Name of the city where the address occurs.	
Street Suffix Abbr.	4	Char	Type Dependent	Null	Null	Indicates the type of street	AVE, ST, CRT, etc.
Street Post Directional	2	Char	Type Dependent	Null	Null	If the address record is a PO Box type, then this field should be null else it should have a value if Street Pre Directional does not have a value.	N,S,E,W, NE,NW, SE,SW
Address Secondary Abbr.	4	Char	Optional	Optional	Optional		
Address Secondary (Low)	8	Char	Optional	Optional	Optional		
Address Secondary (High)	8	Char	Optional	Optional	Optional		
Address Secondary (Odd/Even)	1	Char	Optional	Optional	Optional		O – Odd E – Even B – Both

City Name	28		Required	Null	Null	City name, required for address query	
Zip Code	5		Required	Null	Null	5-digit Zip Code	
Plus 4	4		Required	Null	Null	4-digit zip code extension	
Zip Code Low	5		Null	Required	Required	Low range for a 5-digit zip code	
Zip Extension Low	4		Null	Required	Null	Low range for a 4-digit zip extension	
Zip Code high	5		Null	Required	Required	High range for a 5-digit zip code	
Zip Extension High	4		Null	Required	Null	High range for a 4-digit zip extension	
Composite SER Code	5		Optional	Optional	Optional	If present, indicates the state is a composite state and that the vendor is to report the individual tax rates under the composite code.	

FIPS State Code	2		Required	Required	Required	State FIPS code as defined by federal government (www.itl.nist.gov/fipspubs)	01,10, 20, 21,25
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



FIPS County Code	3		Optional	Optional	Optional	County FIPS code as defined by federal government (www.itl.nist.gov/fipspubs). Required if a county tax rate is in effect	111,584,958
FIPS Place (Municipality) Number	5		Optional	Optional	Optional	Place, city, municipality FIPS code as defined by federal government (www.itl.nist.gov/fipspubs). Required when the city has a rate in effect.	12548
FIPS Place Class Code	2		Optional	Optional	Optional	Place Class FIPS code as defined by federal government (www.itl.nist.gov/fipspubs)	55
Longitude Data	7		Optional	Null	Null	Expressed as a coordinate (-100.582)	
Latitude Data	7		Optional	Null	Null	Expressed as a coordinate (40.2582)	
Special Tax District Code Source (#1)	2		Optional	Optional	Optional	"VD" for Vendor Defined or "ST" for State Defined. Used when a state has special taxing jurisdictions.	
Special Tax District Code (#1)	5		Type Dependent	Type Dependent	Type Dependent	State assigned code for a special taxing jurisdiction	
Type of Taxing Authority Code (#1)	2		Type Dependent	Type Dependent	Type Dependent	Code list from X12 Data Element 1721. Used when a state has special taxing jurisdictions.	

:							
Special Tax District Code Source (#20)	2					"VD" for Vendor Defined or "ST" for State Defined Used when a state has special taxing jurisdictions.	
Special Tax District Code (#20)	5					State assigned code for a special taxing jurisdiction	
Type of Taxing Authority Code (#20)	2					Code list from X12 Data Element 1721. Used when a state have special taxing jurisdictions.	

## Appendix F

### SER Examples

This example shows how tax would be calculated and reported on a \$1000 taxable purchase for a "Single Rate" state and a "Composite Rate" state. The SER Jurisdiction Detail for an "Single Rate" state would look like:

Jurisdiction Code	Juris Tax Due Sales Intra-state	Juris Tax Due Sales Orig Inter-state
27 (State)	\$650	\$0
059 (county)	\$30	\$0
65888 (City)	\$90	\$0
XXXXX (Spec Tax District)	\$130	\$0

The SER Jurisdiction Detail for a "Composite Rate" state would look like:

Jurisdiction Code	Juris Tax Due Sales Intra-state	Juris Tax Due Sales Orig Inter-state
18122 (Composite SER Code)	\$900	\$0

### Appendix G

Examples of comma delimited file (CSV). Note: File 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.

#### SSTP Boundary Table Example

	Address Level	9-digit Zip	5-digit Zip
Record Type	A	4	Z
Beginning Effective Date	1/1/2003	1/1/2003	1/1/2003
Ending Effective Date	12/31/2005	12/31/2005	12/31/2005
Low Address Range	1000		
High Address Range	2000		
Odd / Even "Range" Indicator	O		
Street Pre-Directional abbr.	SW		
Street – Name	Simple		
Street - Suffix Abbr.	DR		
Street - Post Directional			
Address Secondary Abbr.			
Address Secondary (Low)			
Address Secondary (High)			



5-digit zip code CSV File

Z,20030101,20051231,,,,,,,,,,,,,84075,,84076, , ,49,49,003, ,,,,,,,,,,,,,, (until end)

Address Level CSV File

A,20030101,20051231,1000,2000,O,SW,SIMPLE,DR,,,,,Anywhere,84075,8944,,  
 ,,,,49,49,003,12345,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,(for 20 special tax districts)

Rate Table

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	0.01000	0.01000	20040101	20041201
49	01	12345	0.0125	0.0125	0.0125	0.0125	20040101	20041201

CSV File 49,45,49,,004875,0.04875,0.04875,0.04875,20040101,20040101  
 49,00,003,0.01,0.01,0.01,0.01,20040101,20040101  
 49,01,12345,0.0125,0.0125,0.0125,0.0125,20040101,20040101

**Appendix H**

Support for standard web services

Each state must maintain a copy of its Boundary database and Rates database in CSV format for download by sellers and CSPs. Each database itself is a set of relational tables. Some sellers or CSPs may not wish to maintain their own copies of all of the state databases. These sellers and CSPs may wish to query databases maintained by the states, or at some future time by a central SSTP operation. Some states currently offer web-based queries into their databases; however these require a human to manually enter the zip code or address being queried. Web services provide a way for a state to provide a fully automated method by which a seller’s or CSP’s computer system can query the state databases.

It is proposed that all states support a uniform query method to be used by CSPs and sellers against the tax jurisdiction sourcing and tax rate databases. In order to enable a fully automated query process from the CSP or CAS software, each state would host a web service supporting a standardized set of SQL queries. It is proposed that the SSTP Governing Board reserve a uniform set of URLs (web addresses), differing only by an embedded two-character state code. This will enable the CSP or CAS software to insert the appropriate state code into its web service client and perform the query, independent of which state is being queried. The actual code for the state web services and web service query will be developed through the work of the TIGERS group, and will be made available on the SSTP website, [www.streamlinedsalestax.org](http://www.streamlinedsalestax.org).

## Appendix I

### Type of Taxing Authority Code – X12 Data Element 1721

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

00	County	40	Township and County
01	City	41	City and School
02	Town	42	County collected by Other Taxing Authority
03	Village	43	State and County
04	Borough	44	Central Collection Taxing Authority
05	Township	45	State Taxing Authority
09	Other Municipality	49	Other Combination Collection
10	School District	50	Bond Authority
11	Junior Colleges	51	Annual County Bond Authority
19	Other Schools	52	Semi-annual County Bond Authority
20	Water Control	53	Annual City Bond Authority
21	Utility District	54	Semi-annual City Bond Authority
22	Sanitation	59	Other Bond Authority
23	Water or Sewer District	61	Assessment District
24	Reclamation District	62	Homeowner's Association

25	Fire or Police	63	Special District
26	Roads or Bridges	69	Other Special Districts
27	Hospitals	70	Central Appraisal Taxing Authority
29	Other Municipal Services	71	Unsecured County Taxes
		72	Mobile Home Authority
		79	Other Special Applications

Please note that the numbers are not consecutive and that some numbers are not used.