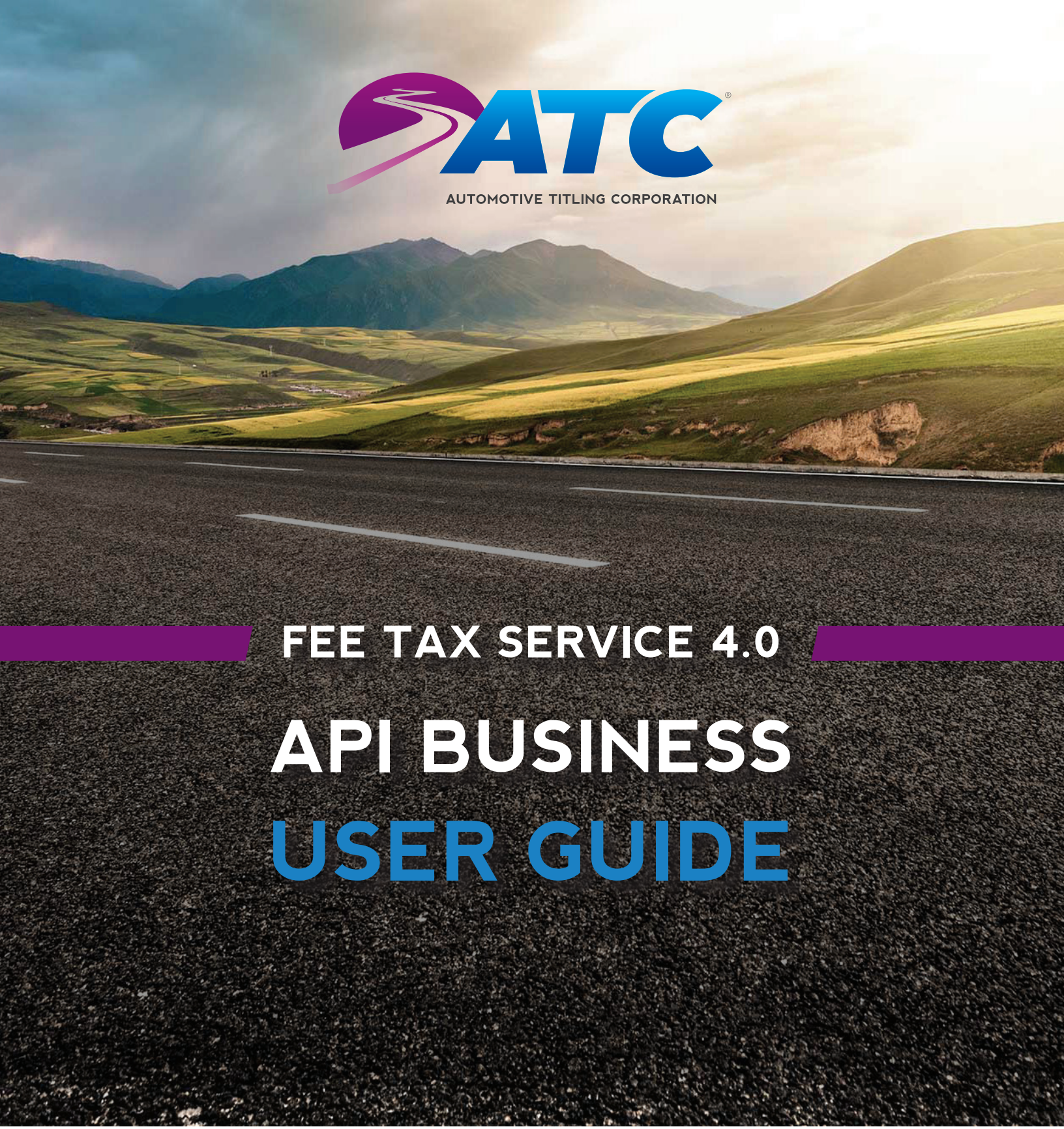

FEE TAX SERVICE 4.0

API BUSINESS USER GUIDE

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1 – OVERVIEW

The ATC Sales Tax and Reg Fee Service is a REST API that allows consuming applications ("CAs") to get sales tax and registration fee information in real-time for your solution. These fees and taxes are assessed based on the State, County, City provided in the request along with additional specific transaction information listed below. The service factors in over 50 data points when determining the final fee amount that can be easily digestable in your solution.

1.1 – WHAT DOES THE SERVICE DO?

The API utilizes an extensive data backbone of up-to-date title and registration rules for each state/ county/ city combination in the United States which are monitored for changes on a daily basis. By supplying the fee service with details about the transaction (such as purchase price, vehicle type, vehicle weight, etc.) and providing it with a valid city, county, and state, the service is able to not only look up the appropriate fees and taxes, but also calculate their formulas into a final dollar amount.

This allows CAs to directly use the results from the service for their own purposes without having to worry about any additional complications or extra work—the numbers come back from the service with no manual replacement required. Sales taxes are aggregated and presented in an easily digestible format for quick reference. Penalty fees are also segmented allowing the CA to draw clear and immediate attention from the end user. The CA can even get individual formulas in textual format as well as numeric format with data points replaced if such level of detail is required.

In addition to actual numbers, the service also provides important notes. These can be simple reminders, such as "the state of New Hampshire does not have a sales tax," but they can also be very important details, such as qualifications to receive military waivers and discounts for a particular state. The notes are meant to be read and interpreted by people as opposed to the numbers, which can easily be processed by an application. If notes are provided in the response, they should be given ample consideration.

1.2 – USAGE

The Tax and Fee API was designed to assist in all scenarios that a given CA might want relating to fee and tax information. Whether looking for only the final sum of all sales taxes for a transaction, or registration fees with a full breakdown of each fee including formulas in textual and numeric form, a few simple configurations in the request will supply the service all it needs to accommodate.

1.3 – WYSISYG (WHAT YOU SEE IS WHAT YOU GET)

The service is designed to take in as little information as the CA provides, with very few mandatory pieces of information. This implies that if the CA wants a particular data point to be a factor in the fee calculations, it must be provided in the request to the service.

Alternatively, there is an option to force the service to return an error if any data is missing. This would be a scenario where you want to guarantee every data point for each fee formula is specifically provided by the CA. In this scenario, the service will specify which data points are missing so the CA can respond accordingly.

* ATC recommends that all CA's send as much variables (listed below) as possible to ensure a more accurate response. The less variables sent in the request means a more broad response.

1.4 – VERBOSITY

One of the most important data points used by the service is "verbosity". This is an integer value representing increasing levels of detail in the response. The reason this is so important is because it may significantly affect the results the CA receives from the service.

At the lowest level of verbosity (0), the service only returns the sum of all fees and taxes; it does not return any break down of individual fees, even by name. At the highest level of verbosity (3), the service returns each individual fee, along with multiple versions of each fee's formula. By configuring the verbosity in the request as each CA requires, the service is able tailor the detail and payload size of the response.

One important exception to verbosity relates to the notes in the response. Notes are not affected by verbosity. Regardless of what you set as the verbosity level, the service will return all relevant notes for any given request.

See Reference Information for more details on data points discussed in this section.

2 – IMPLEMENTATION DETAILS

All communications with the fee service are HTTPS requests and responses usually under the content type of “application/xml” (an exception would be a JSONP request). By standardizing all input data points into one XML schema, the service is able to represent the transaction in an easily traversable fashion. It also allows for tight control over the payload going both to and from the service. All CAs can use the provided XSDs to both validate and ensure security of interactions with the fee service.

2.1 – END-TO-END FLOW

There are a few basic steps that will occur in each transaction with the fee service:

GATHER INFORMATION

First, the CA must gather all of the required information it will use in the request to the service. This could come from a simple web form, internal DMS, or even third party services. The responsibility is on the CA to ensure the information being sent to the fee service is correct and/or valid.

FORMAT INFORMATION

After gathering the data, it must be formatted into standard XML according to the schema that the service expects. This could be done a number of ways, such as dynamically creating an XML object from the XSD using your language of choice. It could also be as simple as having a string with placeholders that get substituted for values. It is also advisable to use the XSD to validate the payload before proceeding to the next step of sending the request to the service. This ensures the data going out to the service is well-formatted and will save a round-trip if an error is found.

SEND REQUEST

Once the payload is confirmed to be accurate and complete, the CA will send an HTTP request to the fee service with the payload as the request body. The content type of the request will vary based on the specific implementation and the platform being used by the CA. Under normal scenarios, the content type will be “application/xml” and will send only the payload in the request body.

See the Web-App / Widget Friendly section for more details on other methods.

PROCESS RESPONSE

Upon receiving the response from the service, the CA must determine if the call was successful or not. Rarely will the service return with an error status code in the HTTP response. Instead, it uses the response payload to communicate errors with the CA. It is strongly advised to use the XSD to validate the response from the service.

USE DATA AS NEEDED

Once the response is deemed successful and the information has been deserialized to its component values, the CA is free to use the data at will. For example, it could be used to display in a web page with other transaction information, write to a DMS, or output into a spreadsheet.

3 – REFERENCE INFORMATION

DATA POINTS

DATA POINT	DATA TYPE	EXPECTED VALUE(S)	SERVICE REQUIRED
Type	String	Always use a value of "FeeQuote"	Yes
Quote Type	String	**A** – include all fees and taxes **S** – only include sales taxes **R** – only include registration fees	Yes
Verbosity Level	Integer	**0** – only total **1** – fee breakdown **2** – fee breakdown and details **3** – fee breakdown and replacement See Verbosity section for more information	Yes
State	String	Name of state or 2 letter abbreviation	Yes
County	String	Name of county	Yes
City	String	Name of city	Yes
Outside City Limits	Boolean	**1** – Registering outside of city limits (ignores city fees and taxes) **0** – Registering inside of city limits	No
Customer Type	String	**D** – Dealer **F** – Financial **C** – Consumer	Yes
Title Status	String	**MSO** – Manufacturers Statement of Origin **T** – Title	Yes
Vehicle Type	String	**PV** – Passenger Vehicle **LT** – Pick-up Truck **M** – Motorcycle **RV** – Motor Home **T** – Travel Trailer **O** – Other **CC** – Cab & Chassis **SUV** – Sports Utility Vehicle	Yes
Transaction Type	String	**P** – Purchase **L** – Lease **R** – Refinance **B** – Lease Buyout	Yes

DATA POINT	DATA TYPE	EXPECTED VALUE(S)	SERVICE REQUIRED
FuelType	String	G – Gas E – Electric DI – Diesel H – HyBrid	No
Lien Status	Boolean	1 – Has a lien 0 – Does not have a lien	Yes
Base Price	Decimal	Base price of the vehicle	Yes
Cylinders	Integer	Number of cylinders	No
GVW	Integer	Gross Vehicle Weight	Yes (except for PV, Motorcycle & SUV vehicles)
GVWR	Integer	Gross Vehicle Weight Rating	No
Weight	Integer	Vehicle Weight	Yes
HP	Integer	Horsepower	No
Year	Integer	Manufacturing year of the vehicle	No
Is Plate Transfer	Boolean	1 – Is a plate transfer 0 – Is not a plate transfer	Yes
Plate Type	String	R – Regular C – Commercial	Yes
Down Payment	Decimal	Amount of down payment	No
Monthly Payment	Decimal	LEASE ONLY. Amount of monthly payment	No
Months in Term	Integer	LEASE ONLY. Number of months in the lease	No
Residual Value	Decimal	LEASE ONLY. Value of the vehicle after the lease	No
MSRP	Decimal	Manufacturer's Suggested Retail Price	No
Trade In Amount	Decimal	Value of trade in	No
Taxes Paid to Another State	Decimal	Amount of taxes paid to another state during the transaction	No
Days Since Purchase	Integer	Number of days since the purchase	No
Registration Options	String	M – Military B – Business	No
MPG	Integer	Mileage	No
Length	Integer	Length of Vehicle	No

DATA POINT	DATA TYPE	EXPECTED VALUE(S)	SERVICE REQUIRED
CC	Integer	Motorcycle CC	No
Registration Months	Integer	Registration in Months	No
Dealer Rebate	Decimal	Amount of detail rebate	No
Manufacturer Rebate	Decimal	Amount of manufacturer rebate	No
“Taxable”	Decimal	See “Taxable” Names section	No
Referral	Boolean	1 – Is a Referral 0 – Is not a Referral	No (Optional Filter)
Promotion	Boolean	1 – Is a Promotion 0 – Is not a Promotion	No (Optional Filter)
Lease Taxes Paid Upfront	Boolean	1 – Is Lease Taxes Paid Upfront 0 – Is not Lease Taxes Paid Upfront	No (Optional Filter)
InState	Boolean	1 – In-State fees are retrieved 0 – Out-Of-State fees are retrieved (Default value is ‘0’ when no value is provided in request)	No
Override Seller	Boolean	1 – Seller address is considered for fee retriving 0 – Seller address is not considered for fee retriving	Yes (If Seller tag is added)
Seller Name	String	Name of the Seller	No
Seller Address1	String	Address1 of the Seller	No
Seller Address2	String	Address2 of the Seller	No
Seller State	String	Name of seller state or 2 letter abbreviation	Yes (if Override Seller is 1)
Seller County	String	Name of seller county	Yes (if Override Seller is 1)
Seller City	String	Name of seller city	Yes (if Override Seller is 1)
Seller Zipcode	String	Zipcode of seller	Yes (if Override Seller is 1)

4 – VERBOSITY

As described in the Verbosity section, each request can specify the level of detail in the response. Here are the possible values and what each one represents:

0 – ONLY TOTAL

The fee service will only provide the sum total of all fees retrieved. There will be no specific information about individual fees.

1 – FEE BREAKDOWN

The fee service returns both name and totals for each individual fee. Alongside the sum total of all fees, sales tax rates and totals are also included. No other information about fees in provided.

2 – FEE BREAKDOWN & DETAILS

The service not only gives the name of each tax and fee, but gives the textual formula used to calculate each fee.

3 – FEE BREAKDOWN & REPLACEMENT

Along with the name, total, and textual versions of each fee formula, the service also provides the formula with the data points replaced, elucidating the mathematical formulae used to calculate the total.

5 – "TAXABLE" NAMES

As mentioned in the Data Points section, some data points can take multiple values under the same heading ("Warranties", "Doc Fees", etc.). Each of these items requires a name to associate with the value. The name is important because sometimes the values are pulled out for specific purposes, so the values must be correct. It is advisable the CA uses one of these names instead of creating its own:

ADDITIONS DELIVERY FEES DISCOUNTS

DOC FEES

EXTENDED WARRANTIES INSURANCE PACKAGES PROTECTION PACKAGES TAX

THEFT PROTECTION

WARRANTIES

6 – SCHEMA DEFINITIONS

[Request & Response schema definitions(XSD) will be furnished upon request.]

7 – ZIPCODES INFORMATION

The ZipCode Finder method will provide our State-County-City combination for a given zip code. In certain cases, a zip code may result in multiple combinations. CA will be expected to pass in the correct combination so that accurate fees can be returned by the service.

8 – INSTATE INFORMATION

ATC Fee Service provides both In-State and Out-Of-State tax and title information. Each incoming request will be evaluated for the InState flag, and appropriate fees will be returned by the service.