

Motor Fuel Tax and XML-based Electronic Filing: A report on Standards

FTA Technology Conference
August 5th, 2009
Boise, Idaho

Presentation Outline

- Existing Motor Fuel EDI Program
- Impetus to redesign Motor Fuel XML
- How we accomplished our Work
- High level look at XML
- Next Steps

Theme of this Presentation

- Less about the XML and more about the journey.....



Brief Explanation of TIGERS and Motor Fuel Uniformity Committee



TIGERS

- TIGERS, the Tax Implementation Group for E-Commerce Requirements Standardization, is a joint working group of the X12 accredited standards committee for data interchange formats and the Federation of Tax Administrators (FTA).
- TIGERS provides technical support for the many tax programs administrated by FTA member states.

Motor Fuel Uniformity Committee

- The Uniformity Committee, as part of FTA, has developed and continues to foster a very unique and very effective partnership among the various groups involved in the Petroleum Industry/Motor Fuel Tax Administration.
- This includes: Industry, Software providers, State, Federal and International Governments involved in Motor Fuel Tax Administration.

Uniformity Committee continued.....

- The Motor Fuel Uniformity committee has provided standards based EDI filing specifications since 1995.
- **This includes:**
 - X12 EDI transactions for return and information sharing
 - Taxonomy (Forms and definitions)
 - Sample State Implementation Guide
 - Approval process for state specific EDI mappings and Implementation Guide
 - Control and Maintenance of code lists.

Uniformity Committee continued.....

- There are currently 19 states that utilize EDI based standards to capture the information required to administer their Motor Fuel Tax program.
 - A version of these standards are also used by the IRS to administer their ExSTARS program.

Note: An Electronic filing program is critical for states with Motor Fuel tracking system. You must have detail by individual load to accurately track the movement of fuel. ***Important for Federal Highway matching funds.***

Petroleum Industry's Commitment to EDI

- The Motor Fuel industry has a long history of utilizing EDI standards.
 - They were one of the first industries (early 80's) to build complete backend systems that were dependent on EDI transactions to operate their daily business.
 - Inventory
 - Accounting/Billing
 - Payment

Motor Fuel EDI Program

- The EDI program will continue to function for the foreseeable future.
 - **Reasons:**
 - Major investment by Petroleum Industry
 - IRS Fuel Section still using EDI standards
 - No single driving force as present in the MeF program

But several factors lead the Uniformity Committee to request that TIGERS assist with redesigning the original Motor Fuel XML.



Impetus to Redesign the Motor Fuel XML

- In 2006, a state mandated XML filing using a proprietary non-standards based format.
 - Industry and Software community not happy.....
- Several more states expressed interested in moving to XML.
 - Desire to migrate directly to XML instead of EDI.
 - Many states already had experience with MeF XML projects

Impetus to Redesign continued....

- The 1999 draft Motor Fuel XML was created prior to the development of TIGERS standards for XML.
 - Since that time TIGERS and the IRS have created a set of core XML standards for return format and transmission.
- Industry expressed concern there were no “true” XML standards and the states would “do their own thing”.
 - They wanted an XML equivalent to the EDI standards based program.

Original Motor Fuel XML Project

- The initial Uniformity XML effort was simply too far ahead of XML standards development.
- TIGERS was still about 4 years away from establishing the initial standards for:
 - General XML return format
 - A library of XML components, such as taxpayer address, that can be used across tax types
 - The “packaging” and transmission of the XML returns

Project Initiation Timeline

- Uniformity Committee decides to request TIGERS assistance with developing the new Motor Fuel XML standards.
 - Initial discussions were held at the September 2006 Uniformity Meeting
 - Decision to request TIGERS involvement was voted on at the January 2007 Uniformity Meeting
- Formal request submitted at TIGERS meeting in February 2007.
 - TIGERS agreed to jointly develop the Motor Fuel XML
- Actual work started in the spring of 2007.

Motor Fuel XML Redesign Team

- The Core Group:
 - Doreen Warren - Idaho Department of Revenue (past Uniformity Chairperson)
 - Cheryl Gilson - Project Manager for ZyTax (a leading Fuel Software Company)
 - Larry Hanson - System Architect for California Board of Equalization (**also designer of original 1999 XML**)
 - Stan Whaley - System Project Consultant for Florida Department of Revenue

Key Design Parameters

- Development is a joint Motor Fuel Uniformity and TIGERS initiative.
- Data structures will be based on the Motor Fuel Uniformity approved forms and business model.
- Use existing Uniformity codes list such as Schedule, Product and Mode.
- Convert 5000 series TIA summary codes to XML elements.
- Concentrate on the 5 major return types.

Design Parameters continued...

- Utilize **Modernized eFile** work to allow states and companies to leverage already deployed initiatives in Corporate, Streamlined Sales, Payroll and Personal Income Tax programs.
- Develop a Web Services component for the Motor Fuel program.
- Publish an implementation ready version, of the XML, by September of 2009.

Quick Overview of Motor Fuel Tax

- **Supplier**
 - Largest Petroleum Companies.....top of the food chain. Collect some or all of the taxes
- **Distributor**
 - Typically the middle man between the Supplier and Retail station (May collect a portion of the taxes....different state by state. Collection of tax at the rack or below the rack
- **Terminal Operator**
 - Manager's of the Terminals (Tank Farms).....they don't own the product.....just manage the terminal facility. They must be registered with and licensed by the IRS. Typically aren't required to collect tax

License Types continued....

- **Retailer**
 - Typically the person responsible for selling the fuel to the consumer. May or may not collect the taxes
- **Carrier**
 - They provide informational reports detailing the physical movement of fuel

Basic Components of a Return

- **Header**
 - Information about Taxpayer/Company
 - Tax Type and Filing Period
 - Contact Info
 - Address Info
 - Check Values (TotalQuantityTransported, TotalDue)
- **Report**
 - Information about the type of report
 - Return/Filer Type (Supplier, Carrier...etc)
 - Information about the filing (No Business Activity, Sold/Acquired Date, Inventory Date)
 - Check Values (TotalQuantityReported)
 - Inventory information by product (Beginning/Ending, Gains/Losses)

Return Structure continued....

- **Summary**
 - Information that can't be derived from the Schedule Detail
 - Tax and Fees, Credits, Bad Debt, Penalty and Interest
 - These can be reported by Dollar Amount and/or Quantity
- **Schedules**
 - Information about the individual loads of Fuel
 - Schedule Type and Product define a type of transaction (Taxable vs Non Taxable)
 - Information about Buyer, Seller, Mode, Origin, Destination, Receipt Date, Bill of lading and Gallons
 - Gallon are Billed, Net and/or Gross

How the We Accomplished the Work.....



TIGERS and Uniformity Committee Working Relationship

- XML technical work handled by Redesign Team.
 - Analysis
 - Created the Schemas
 - Requested TIGERS assistance as needed
- Business questions addressed by the Uniformity ECommerce and Full Committee.
 - 20+ years Business experience
 - Confirmed necessary data was captured by the XML
 - Provided guidance on business issues that impacted the XML design

Initial Research

- The redesign team did extensive initial research to identify and validate the data requirements.
 - Some EDI specific data elements were eliminated
- Next step was to determine how we could leverage the MeF work, but still meet the unique Motor Fuel requirements.

**** We only had to worry about the XML structure, not reaching a consensus on the information passed within the data format. ****

Virtual Workshops....

- Redesign Team used Conference Calls and Webinars to create work products.
 - Made interesting by the fact we had 4 members and they lived in 4 different time zones

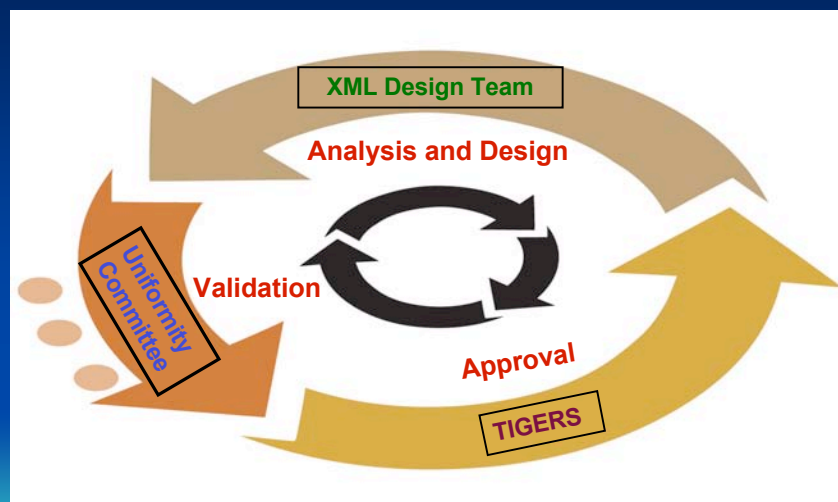
**** Our core redesign team did not have a single face to face work session during this entire process.**



Review and Validation

- Team conducted extensive Webinar sessions with Uniformity Committee members to confirm the XML schemas met their business needs.
- Progress reports were made at TIGERS and Uniformity meetings.
- Review and Validation of deliverables.
 - Full Uniformity Ecommerce Committee
 - TIGERS

Review cycle



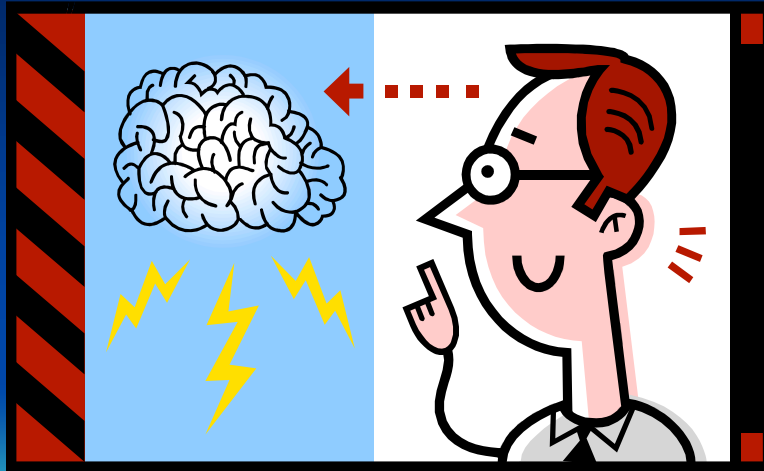
After much stimulating debate.....



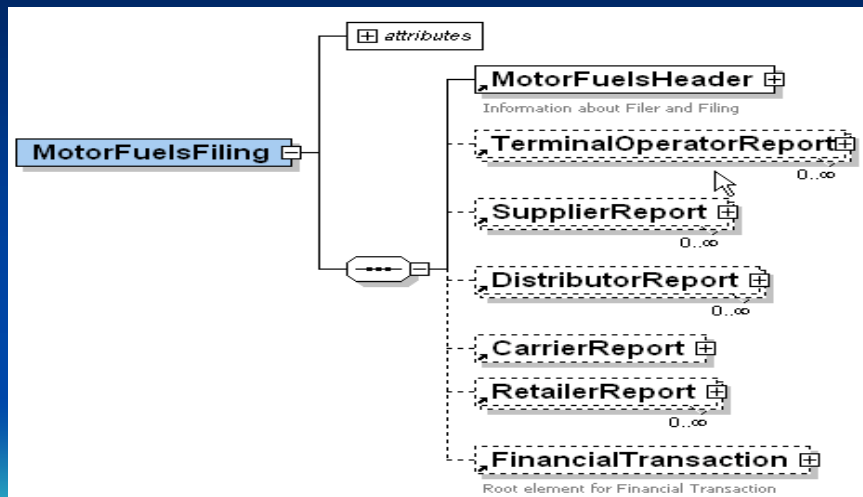
Key Design Concepts

- Generic data elements shared across returns
- Separate schema per return type
- Very Flexible Schemas based on EDI model
- Shared library of Motor Fuel eFile Types
- Allowed states to restrict most enumerated lists
- Created structures to handle the product specific vs total summary information

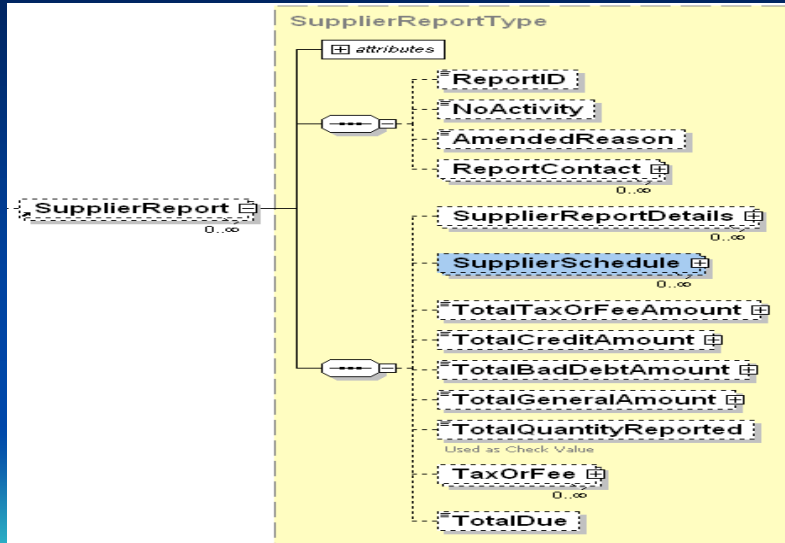
Time for a little XML



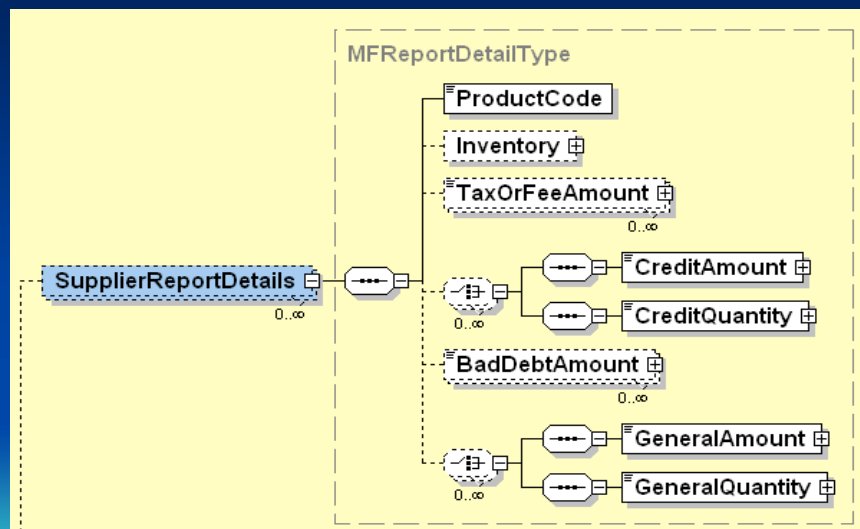
Overall Motor Fuel Filing Diagram



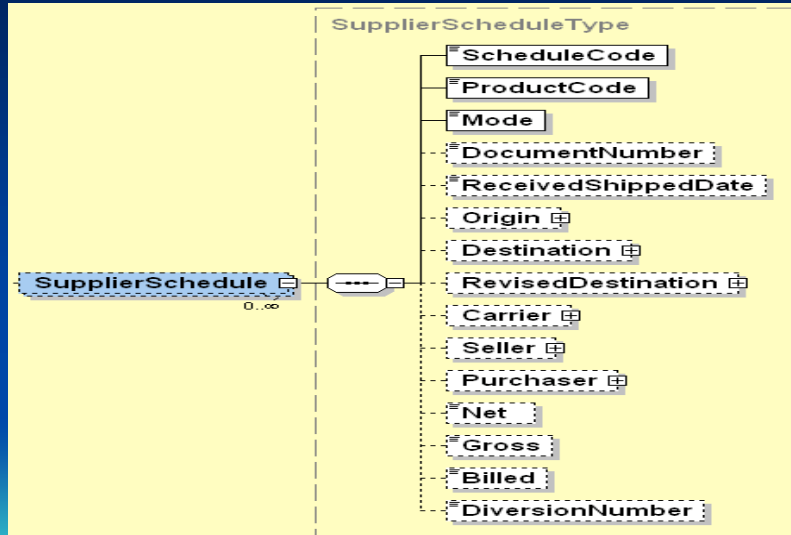
Supplier Report Structure



Supplier Report Details



Supplier Schedule



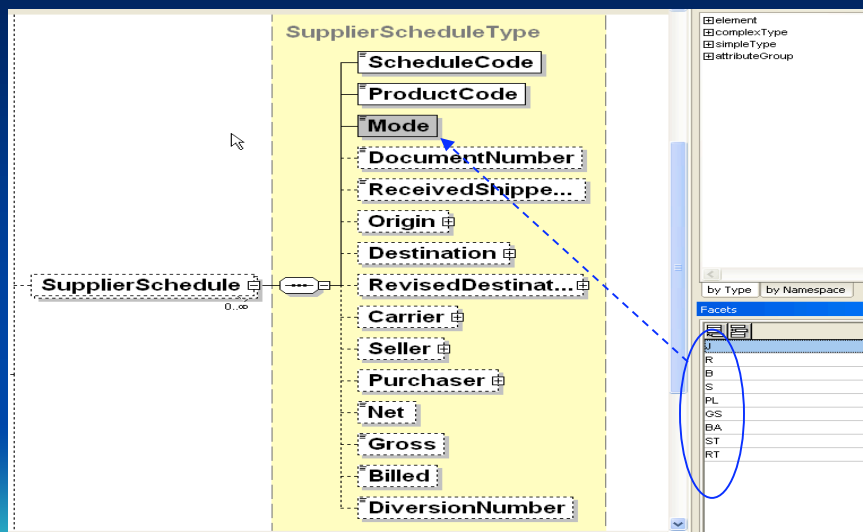
Maintenance of Enumerated List

- The Uniformity committee decided that the Mode of Transportation was the only approved code list stable enough to include in the schema.
- It made more sense to allow each state to provide a restricted list of values.
- Some of these lists may have more than 100 codes of which a state may only use 10-15.
- The list change at infrequent intervals.... IRS and/or State changes.
- Restricting the codes allow the state to enforce within schema

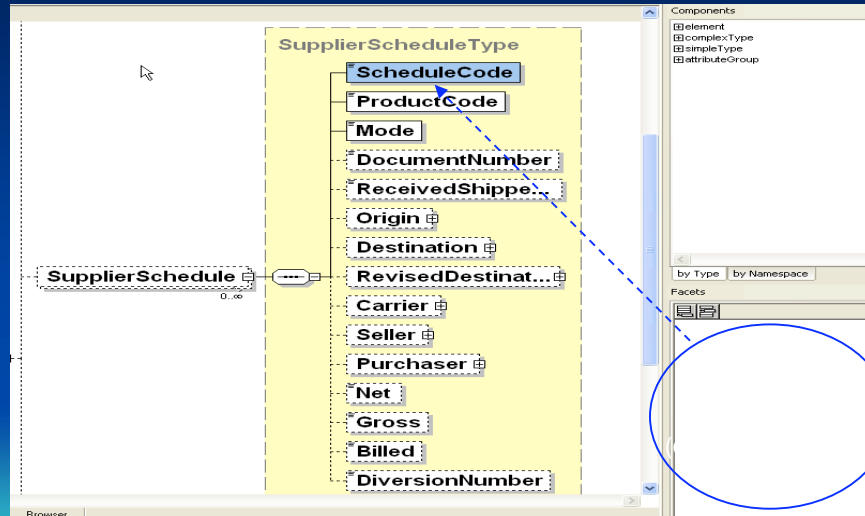
Motor Fuel Enumeration File Types

annotation	This file is a library of the Uniform Codes and approved enumerated values used in FTA Uniform Motor Fuels reporting.	
attributeGroup	enumerationSource	ann: Source and version of the Enumeration File (could be a State)
simpleType	MFCurrencyType	ann:
simpleType	MFUnitsOfMeasureType	ann:
simpleType	MFProductCode	ann: FTA Uniform Product code.
simpleType	MFModeCode	ann: FTA Uniform Transaction Mode code.
simpleType	MFCarrierScheduleCode	ann: FTA Uniform Schedule code.
simpleType	MFDistributorScheduleCode	ann: FTA Uniform Schedule code.
simpleType	MFRetailerScheduleCode	ann: FTA Uniform Schedule code.
simpleType	MFSupplierScheduleCode	ann: FTA Uniform Schedule code.
simpleType	MFTOScheduleCode	ann: FTA Uniform Schedule code.
simpleType	MFTaxOrFeeCategoryType	ann:
simpleType	MFTaxOrFeeItem	ann:
simpleType	MFCreditAmountItem	ann:
simpleType	MFCreditQuantityItem	ann:
simpleType	MFBadDebtItem	ann:
simpleType	MFGeneralAmountItem	ann:
simpleType	MFGeneralQuantityItem	ann:

Example of Included Enumerated List



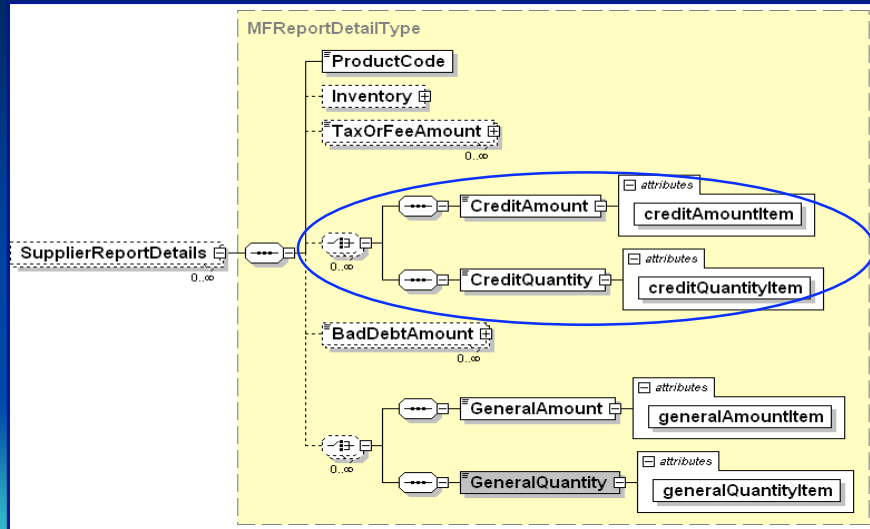
Schedule with Enumerated List that can be restricted by State



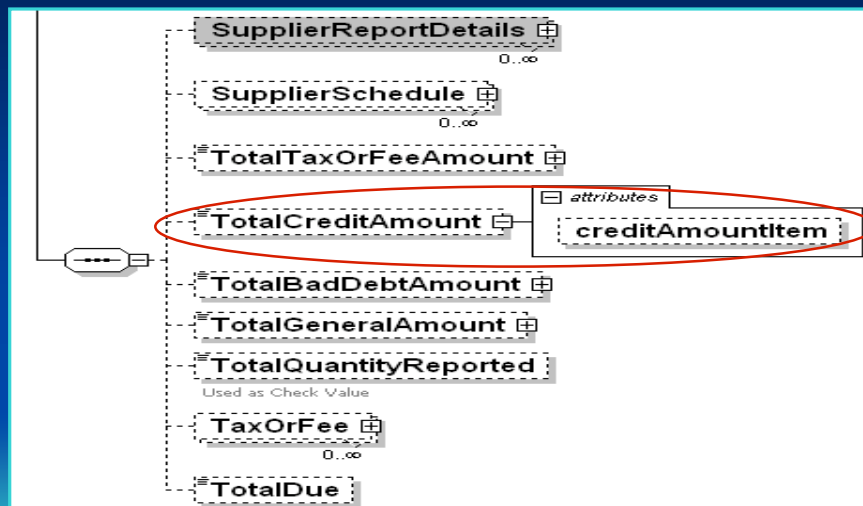
Product Specific vs. Summary Total

- Structure was developed to allow states to capture totals by product and/or at summary level.
 - States are allowed to create a list specific to their needs.
 - The GeneralAmount element handles those “left handed widgets” totals unique to one state.
 - We allow for currency and/or quantity amounts
 - Some states want both.

Example of Credit with Mandatory Product Code



Example of Total Credit Amount



Simple EDI vs. XML Comparison

EDI segment for Schedule, Product and Mode

TFS~T3~3A~PG~065~94~J \

XML for Schedule, Product and Mode elements

```
<ScheduleCode>3A</ScheduleCode>
<ProductCode>065</ProductCode>
<Mode>J</Mode>
```

Rules concerning XML Usage

- FTA will be the keeper of the uniform XML schema
- States can adapt the uniform XML schema using the following guidelines:
 - States cannot add elements that are not in the master schema, but can elect to use a subset of the FTA defined elements.
 - States cannot rename elements that are in the master schema.
 - States cannot alter schema structure from the master schema.
 - States can restrict data, but cannot expand it (reduce field length, but not increase)
 - Bottom line: any XML instance document that validates against the state-specific schema must still validate against the master schema
 - **Uniformity eCommerce committee will “decide” whether the State’s XML and Implementation Guide are in compliance.**

Next Steps

- TIGERS
 - Work with TIGERs to update the Motor Fuel Schemas with the MeF standards (Header, Financial....)
 - Adding Web Services to the existing HTTPS and FTPS protocols
 - Developing additional Motor Fuel documentation for the StateMeF Page
- Motor Fuel Uniformity Committee
 - Documentation has been included in the 2009 Ecommerce Guide
 - Working with states interested in using Uniformity XML
 - Update documentation as states implement

Next Steps continued

- Phase Two XML work
 - Create Information Sharing report (EDI 826)
 - Develop best practices document for Motor Fuel XML
 - Update documentation as needed for 2010 guide

If you are interested.....

- Please contact:
 - Terry Garber, Co-Chair, TIGERS garbert@sctax.org
 - Traci Bullock, State Co-Chair, Motor Fuel Uniformity Ecommerce Sub-Committee bullockt@sctax.org
 - Stan Whaley, Team Lead, Motor Fuel Uniformity XML Workgroup
whaleys@dor.state.fl.us
- Visit StateMeF.com/Projects/Motor Fuel to view Schemas and Documentation

Any Questions?

