

Auditor 301

Projecting & Sampling

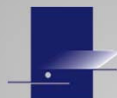
Betsy McCabe – Nevada

Jesse Taylor – Maryland

Heidi Crawford - Nebraska

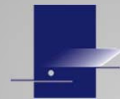
Sampling

- How do you pick sample quarters?
- Do you do this once all the records are verified for the audit period?
 - Is it different for a field audit vs. an audit where the carrier is mailing the records in?
- At what point do you start picking test units from the fleet?



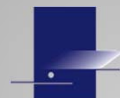
Sampling (cont'd)

- If you have multiple units in a fleet but no unit summaries how do you proceed?
- If the records are not consistent during the audit period, and the sample you select appears to be adequate, would you make adjustments in the other quarters?



Sampling (cont'd)

- Do you treat distance and fuel differently when it comes to sampling?
- When selecting your sample, what do you do if a carrier has multiple terminals?
- Does your sample need to cover every jurisdiction the carrier traveled?



Projecting

- How do you determine when to project / isolate / expand?
- Once you project distance do you reconcile to the odometer miles, if available?



Projecting (cont'd)

- What do you do in an audit when you have bulk fuel with no withdrawal logs?
- What do you do if you find an unreported jurisdiction for distance or fuel in your sample?
 - If you feel it needs to be projected, how do you handle that?



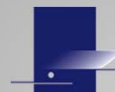
Calculating an adjustment for unreported distance

TEST QUARTER UNREPORTED JURIS.:						
TEST QTR.	UNREPORTED ADJUST.	TOTAL RECAP. DISTANCE				
2/17	268	32,051				
UNREPORTED JURIS. ERROR %	268	32,051	=		0.01	
PROJECTION TO NON-TEST QUARTERS:						
NON-TEST QTR.	TOTAL RECAP. DISTANCE	OTHER ERROR %	=	OTHER ADJUST.		
3/16	28,694	0.01		287		
4/16	14,485	0.01		145		
1/17	30,559	0.01		306		
PURPOSE: THIS W/P WAS PREPARED TO MANUALLY PROJECT THE UNREPORTED JURISDICTION ERROR %. THIS COULD NOT BE PERFORMED BY THE AUDIT PROGRAM, SINCE REPORTED XX JURISDICTION DISTANCE WAS ZERO IN EACH QUARTER.						



What about after the projection?

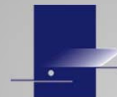
Example	Audited distance after projection	Total odometer distance	Difference in test quarter
1	123,857	124,102	245
2	4,965	4,941	-24



Projecting (cont'd)

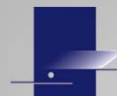
How do you handle missing fuel receipts or prepay receipts that do not show the required information?

- For prepaid receipts how do you know that all the amount paid was initially used when actually fueling up.



Projecting (cont'd)

- Once error percentages are calculated, do you look for those that are unreasonable?
- How do you determine “unreasonable”?
- If you determine an error rate is unreasonable what do you do now?



Projection example

	AZ	CO	KS	NM	OK	TX	Total
Reported Distance	152,568	76,284	152,568	381,419	381,419	381,419	1,525,677
Rept. % of total	10%	5%	10%	25%	25%	25%	
Rept. Distance tested	18,308	4,577	22,885	45,770	15,257	45,770	152,567
Tested %	12%	3%	15%	30%	10%	30%	
Tested audited distance	17,942	9,154	24,026	4,577	7,629	50,347	
Error Rate	98%	200%	105%	10%	50%	110%	



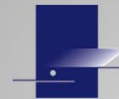
Projection example (cont'd)

- 50 trucks in fleet
 - 20 trucks have manual records
 - 30 trucks have GPS hooked up to the truck's ECM (engine control module)
- You find that several of the units keeping manual records are not recording odometer readings. The GPS system the carrier is using is capturing all of the required data.



Projection example (cont'd)

Number of Units	What type of distance record is available
5	Manual records with fuel odometer readings
15	Manual records with odometer readings on trip sheets
30	GPS

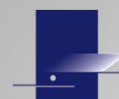


Reviewing unit/fleet MPG's

If you are reviewing unit MPG's and you see this:

Unit	Reported MPG	
1	5.23	80,000 lb. semi
3	4.98	80,000 lb. semi
7	10.98	80,000 lb. semi
12	5.01	80,000 lb. semi

What do you do?

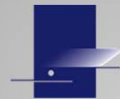


Reviewing unit/fleet MPG's (cont'd)

If you have inadequate mileage source documents and see these reported MPG's:

Quarter	Reported MPG
3/16	12.00
4/16	12.00
1/17	12.00
2/17	12.00

What do you do?



Any other topics or questions?

