HOW TO USE THE

FARS/MCMIS Matching Tool

Fatal crash records are an important aspect of the Federal Motor Carrier Safety Administration's (FMCSA) data driven systems that support the Agency's commercial motor vehicle (CMV) safety programs. FMCSA developed the Fatality Analysis Reporting System (FARS)/Motor Carrier Management Information System (MCMIS) Fatal Crash Record Matching Tool to support your work of reporting all fatal crashes in your State to MCMIS. The FARS/MCMIS Matching Tool helps reconcile differences between the National Highway Traffic Safety Administration's (NHTSA) FARS and FMCSA's MCMIS databases by matching fatal large truck and bus crash records between the two databases.

Why Should I Use this Tool?

SHORT TERM BENEFIT
Improve your State Safety Data Quality (SSDQ) Fatal Crash Completeness (FCC) Measure by resolving discrepancies between the two databases.
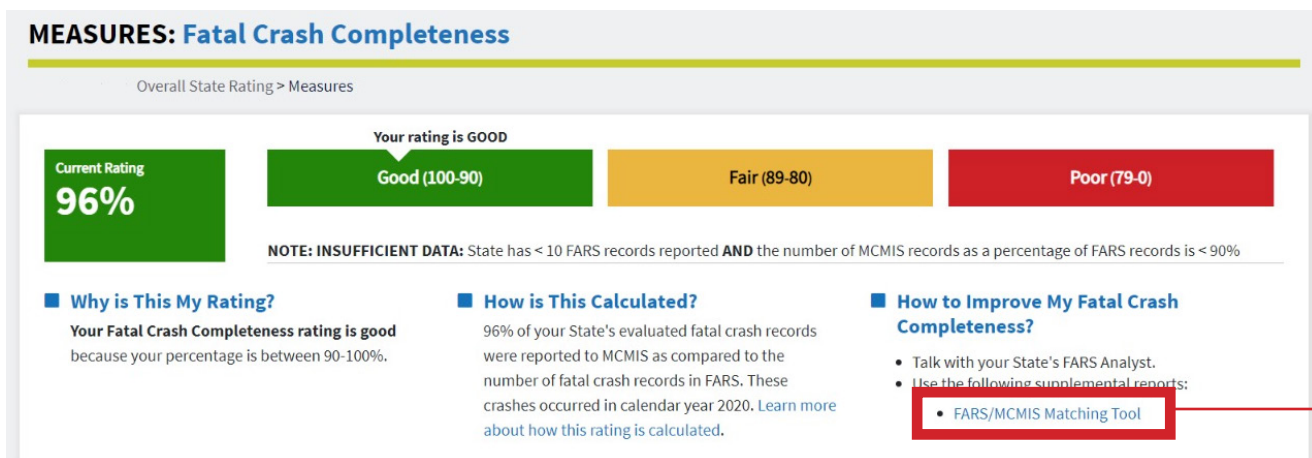
LONG TERM BENEFIT
Identify improvements to your State's crash record processing procedures.

How to Access the Matching Tool

You can access the Matching Tool on FMCSA's Data Quality Website using the following steps:

1. **Sign in** using your FMCSA Portal credentials and password.

2. **Click** State Data, then select your State.

3. **Select** your State's Fatal Crash Completeness (FCC) Measure.

4. **Navigate** to the Supplemental Reports and select FARS/MCMIS Matching Tool.

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Matching Tool Instructions

Note: FARS shows the first 12 characters of the VIN while MCMIS shows all 17. The VINs are only matched on the first 12 characters and therefore do not show as Non-Matched due to this difference in length.

The Matching Tool assigns each MCMIS fatal crash record to one of three buckets that designate whether the MCMIS record matches a record in the FARS database:

1 RECORDS MATCHED

2 RECORDS POTENTIALLY MATCHED

3 RECORDS NON-MATCHED

You can use these results to determine if all reportable fatal crash records have been reported to MCMIS from your State database.

⚠ Using the Comment Feature

The comment feature allows you to enter details explaining why a record may not match. Comments with specific details show that research was completed and document reasons for a discrepancy between FARS and MCMIS. This can avoid duplicate work if someone else is looking at the Matching Tool in the future.

HOW TO ADD COMMENTS
Select the "Show all comments" box and then press "Go." This will display a comment line under every fatal crash record on the Matching Tool.

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HOW TO ADD COMMENTS (CONTINUED)

If you have not added a comment to a record, there will be an "Add Comment" link. If a comment has already been added, the link will show as "Edit Comment." The Matching Tool will display the comment, the individual who submitted the comment, and the date it was submitted.

FARS Non-Truck and Bus Records Potentially Matched to MCMIS Fatal Crash Records										
1	FARS	6/20/2018	03:48 PM	100	BOISE	1FBAX2C	1357119	22	NC	Van	Y
	Edit Comment This is a match with the FARS recorded. The Vehicle type is listed as a van in FARS but should be a bus. 2018 Ford Bus on VIN Check - *Submitted by Holly Skaar on 12/06/2019*										
	MCMIS	6/20/2018	03:48 PM	ID18C4970680	BOISE	1FBAX2CMX	1387119	22	NC	Bus	Y
	Edit Comment This is a match with the FARS recorded. The Vehicle type is listed as a van in FARS but should be a bus. 2018 Ford Bus on VIN Check - *Submitted by Holly Skaar on 12/06/2019*										
2	FARS	5/25/2018	11:37 AM	69	JEFFERSON	3D7KS2			72	ID	Light Truck	Y
	Edit Comment This is a match with the FARS/MCMIS record. The vehicle type is listed as a light truck in FARS. It is a pickup pulling a utility trailer. MCMIS has it as a Truck/Trailer. - *Submitted by Holly Skaar on 12/06/2019*										
	MCMIS	5/25/2018	11:37 AM	ID18C4895010	JEFFERSON	3D7KS28A			72	ID	Truck	Y
	Edit Comment This is a match with the FARS/MCMIS record. The vehicle type is listed as a light truck in FARS. It is a pickup pulling a utility trailer. MCMIS has it as a Truck/Trailer. - *Submitted by Holly Skaar on 12/06/2019*										

When adding or editing a comment, you have two options:

• Type in your comment.

• Select a description from the drop-down box. Currently, there is only one option available: "FARS Exclusion–Medium/heavy duty truck that qualifies as personal use." This option is explained in the Records Non-Matched section of this document.

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1 ## Records Matched

These MCMIS records match to records in FARS. Congratulations, no more work is needed for these records!

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2 ## Records Potentially Matched

These MCMIS records possibly match a record in FARS. They are grouped into two sub-sections indicated by the light blue title bars.

FARS TRUCK AND BUS RECORDS POTENTIALLY MATCHED TO MCMIS NON-FATAL CRASH RECORDS

There are usually two reasons for paired records in this section:

A **The two records appear to be a match, with the exception that the MCMIS record was not identified as a fatal record.** This can happen when the fatality occurs after the accident report was filed and the record was not updated. If you confirm that this is the case there are two steps that you should take:

i. Update the MCMIS record to show the fatality.

ii. If the record was originally marked as an injury, then the injury count needs to decrease by the appropriate number and the fatal count increases by the same appropriate number.

This updated record will be included as a MCMIS fatal record in the next monthly update for the SSDQ FCC Measure. Please remember that the Matching Tool is updated with MCMIS data on a different schedule than the measure, so this record may still show in the "Potentially Matched" bucket until the next update of the Matching Tool.

How to Use the **FARS/MCMIS Matching Tool**

B **The two records appear to be a match, but after further research, you conclude they are not the same crash.** In this situation, there are two steps you should take:

i. Add a comment explaining that research shows that the MCMIS record is not a fatal crash.

ii. Treat the FARS record as a Non-Matched record and follow the steps indicated for in the Records Non-Matched section below.

FARS NON-TRUCK AND BUS RECORDS POTENTIALLY MATCHED TO MCMIS FATAL CRASH RECORDS
Usually, the paired records in this sub-section list the Vehicle Type for the FARS record as not a Truck or Bus (Light Truck, Van, etc.), but the MCMIS record lists it as a Truck or Bus. The first step is to verify that the vehicle is identified correctly in MCMIS. There are usually two reasons for paired records in this section:

A **If your research shows that the record is identified with the correct Vehicle Type in MCMIS, then there is no further action to take for the MCMIS record.** It is considered a best practice to review this with you State's FARS analyst to see if it was identified incorrectly in FARS or if it is simply a data discrepancy between the two databases.

B **If your research shows that the Vehicle Type is not identified correctly in MCMIS, then there are two steps to take:**

i. Upload the MCMIS record with the correct Vehicle Type.

ii. Research the crash processing procedures to identify why the Vehicle Type was initially incorrect. This can provide an opportunity to make corrections to your crash processing logic which could prevent this mistake with future records.

3 ## Records Non-Matched

These MCMIS records do not match a record in FARS. They are grouped into two sub-sections indicated by the light blue title bars.

FARS TRUCK AND BUS RECORDS NOT MATCHED TO MCMIS RECORDS
There are usually three reasons a record appears in this sub-section:

A **The record is correct in FARS, but there is no match in MCMIS.** Use the available FARS data and research the State crash repository to see if there is a record which is in the State file but was not uploaded to MCMIS. Finding the reason why this happened can not only fix this record, but it can present an opportunity to correct the State crash processing logic and potentially identify future fatal and non-fatal crashes which are being incorrectly bypassed for upload to MCMIS.

B **The record meets the weight requirements in FARS for a medium/heavy truck but qualifies as personal use for MCMIS, so it was not uploaded to MCMIS.*** This situation is becoming more common as newer model pickup trucks are heavier than older models. After working with the States on this issue, the Data Quality program now enables State Partners to identify this situation and exclude the FARS record from the SSDQ FCC Measure counts. In order to do this, you must select the description, "FARS Exclusion – Medium/heavy duty truck that qualifies as personal use" from the dropdown menu after clicking on the "Add/Edit Comment" link on the record.

*Note: Personal conveyance, which is the movement of a CMV for personal use while off-duty, still should be considered a reportable crash. This comment should only be used for vehicles which are not used for any commercial purposes.

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FARS TRUCK AND BUS RECORDS NOT MATCHED TO MCMIS RECORDS (CONTINUED)

C **The record appears to match but was not identified as a match by the Matching Tool algorithm.** If your research shows that two records match:

i. Add a comment to both records (one in the FARS Not Matched sub-section and one in the MCMIS Not Matched sub-section) explaining that this record is a match to the corresponding FARS Case #/MCMIS Report #.

ii. Check if there is any missing or incorrect data on the MCMIS record that you could correct. The record pair would then show as a matched pair with the next update to the Matching Tool results. If there are no changes you can make, there is no need to do anything further. Both of these records are included appropriately in each database, and both are counted in the SSDQ FCC Measure.

MCMIS FATAL RECORDS NOT MATCHED TO FARS RECORDS

There are usually two reasons a record appears in this sub-section:

A **The record is correct in MCMIS, but there is no match in FARS.** After your research shows that this record was uploaded correctly to MCMIS, follow up with your State's FARS analyst to review why there is no corresponding record in FARS. This situation does not adversely affect your SSDQ FCC Measure, but it is considered a best practice to coordinate with one another when there are discrepancies between the databases.

B **The record appears to match but was not identified as a match by the Matching Tool algorithm.** Follow the instructions above under FARS Truck and Bus Records Not Matched to MCMIS Records, letter C.

? Questions or Comments?

Some MCSAP Offices find it helpful to collaborate with the State's NHTSA FARS Analyst to help resolve non-matches and identify missing fatal records.

If you need assistance with the Matching Tool, please contact your Data Quality Specialist.