



# Data Now Program (DNP) Data Linking and Comparisons

## Key Takeaways

- Key linking fields for Policy Data and claim data
- Consistently reporting key linking fields
- Monitoring your company's data linking results
- Addressing your company's data linking issues
- How NCCI uses your company's linked data
- Data comparisons across and within data types

## Chapter 1: Overview

### What Is Data Linking?

The use of common data elements to connect policies and claims across and within the various data types.

### Data Linking Example

Simple example: Policy Data for Policy Number WC1234 can be linked to Unit Statistical Data with the same linking fields.



### Data Types

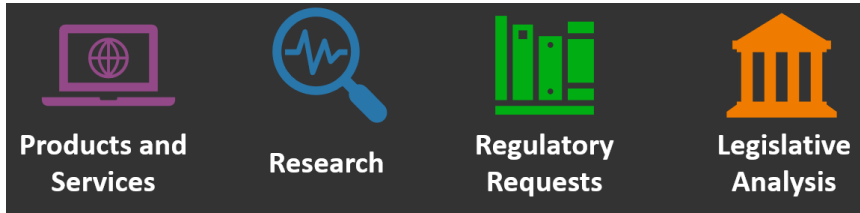
Data linking applies to:

- Policy
- Medical
- Unit
- Indemnity
- Pool
- Financial



# Data Now Program (DNP) Data Linking and Comparisons

## Uses of Linked Data

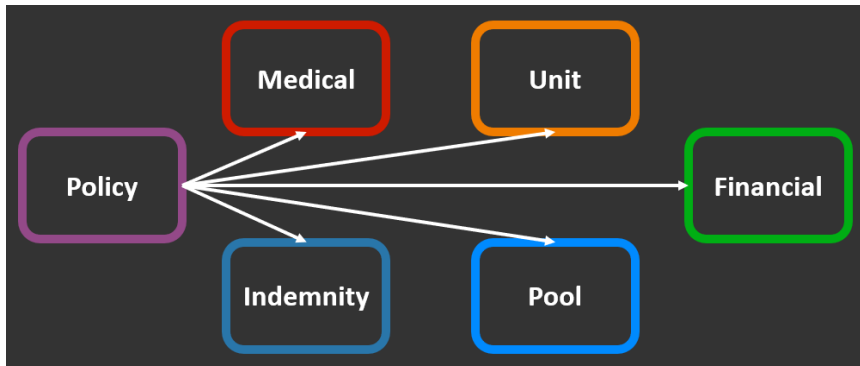


- Linked data provides NCCI with a broad array of claim data for in-depth analysis
- Producing and delivering highly accurate and timely products and services to workers compensation market stakeholders is a core service at NCCI
- Proper linking within and across data types can help to ensure that the data used in our core services is credible

## Chapter 2: Policy Linking

### Applicable Data Types

Policy linking originates when a carrier writes the policy.



Carriers **MUST** use the same values, reported in the same format, for other data types.

### Policy Linking Fields

The first three are common to all data types.

Field	Applicable Data Types
Carrier Code	All
Policy Number	All
Policy Effective Date	All
Exposure State Code	All Except Medical and Indemnity

Exposure State Code is used for Policy, Unit, Financial, and Pool Data. Medical and Indemnity do not include Exposure State Code because they are reported at the claim level.



# Data Now Program (DNP) Data Linking and Comparisons

## Data Should Be Reported Consistently

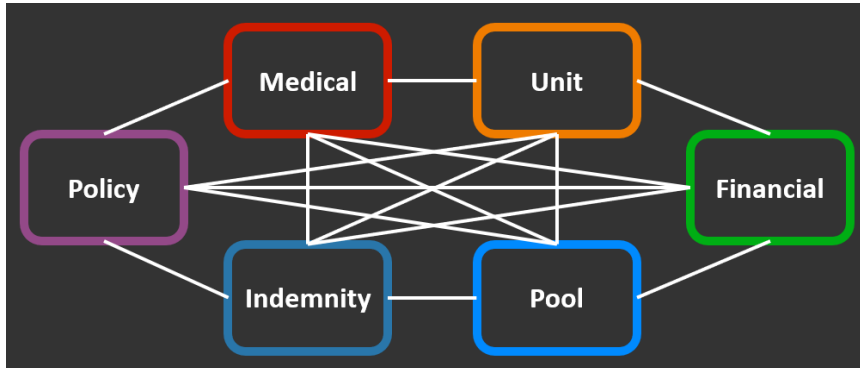
Linking and key field values within each data type and across all data types **must** be reported in accordance with reporting rules and be consistent across data types for the life of the policy.

Field	Policy Data	Unit Data
Carrier Code	12345	12345
Policy Number	WC123	WC123
Policy Effective Date	1/1/2023	1/1/2023
Exposure State Code	FL	FL



## Policy Linking

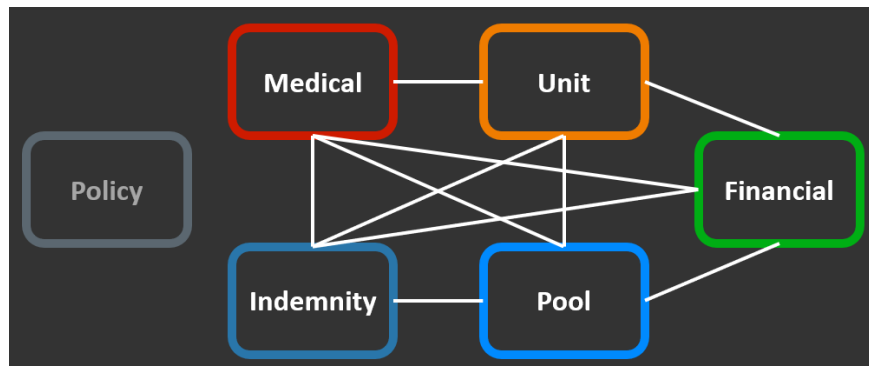
Consistent reporting of Policy Keys across all data types allows NCCI to link Policy Keys between any two of the data types.



## Chapter 3: Claim Linking

Claim linking applies to:

- Medical
- Unit
- Indemnity
- Pool
- Financial



The Policy Data type does not contain any claim information. Therefore, it is not included in claim linking.



# Data Now Program (DNP) Data Linking and Comparisons

## Claim Linking Fields

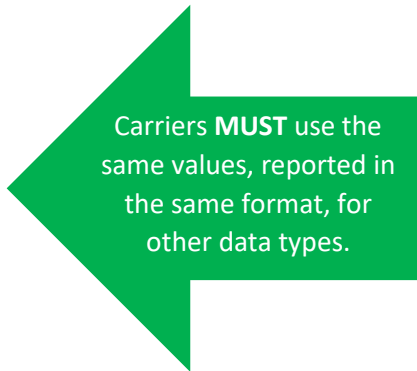
In addition to the policy linking fields, claim linking includes:

Field	Applicable Data Types
Claim Number	All Except Policy
Accident Date	All Except Policy
Jurisdiction State	Unit, Medical, and Indemnity
Accident State	Indemnity Only

## Be Consistent in Reporting Claim Linking Fields

Linking fields must be consistent across data types for the life of the claim and be consistent from one valuation to the next.

Field	Unit Data	Indemnity Data
Claim Number	1111	1111
Accident Date	9/9/2020	9/9/2020
Jurisdiction State	FL	FL



Policy linking fields must match as well as claim linking fields.

## Chapter 4: How to Monitor Your Data Linking Results

### Data Manager Dashboard (DMD)

Review your linking metrics in **DMD**.

**Data Manager Dashboard**

Summary - 33912 - NCCI TRAINING PROPERTY AND CASUALTY CO

Key Indicators | Residual Market | **Linking/Verification**

Unit Claim Linking						
Data Type	Data Refreshed	Received	Linked (%)	Unlinked	Policy Effective Date Range	Linking Parameters
DCI	10/22/2023	2,635	92.64	194	10/01/2019 - 01/31/2022	Carrier Group/Code, Policy Nbr, Pol Eff Dt, Claim Nbr, Jurisdiction State, Accident Dt, Loss Cond Cov Code
Financial-31 Large Loss	11/04/2023	4,423	86.05	612	11/01/2019 - 02/28/2022	Carrier Group, Policy Nbr, Pol Eff Dt, Claim Nbr, State, Accident Dt
Financial-33 VA Coal Mine					No Data Found	
Pool					No Data Found	

Unit Key Field Verification						
Data Type	Data Refreshed	Received	Matched (%)	Unmatched	Policy Effective Date Range	Verification Parameters
Indemnity	10/31/2023	43,524	92.14	3,422	10/01/2019 - 01/31/2022	Carrier Code, Policy Nbr, Pol Eff Dt, Claim Nbr
Medical	10/31/2023	144,888	92.2	11,316	10/01/2019 - 01/31/2022	Carrier Code, Policy Nbr, Pol Eff Dt, Claim Nbr

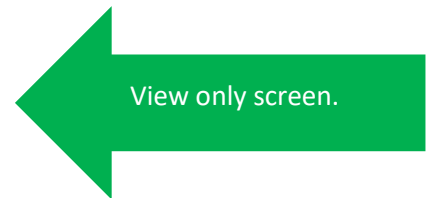
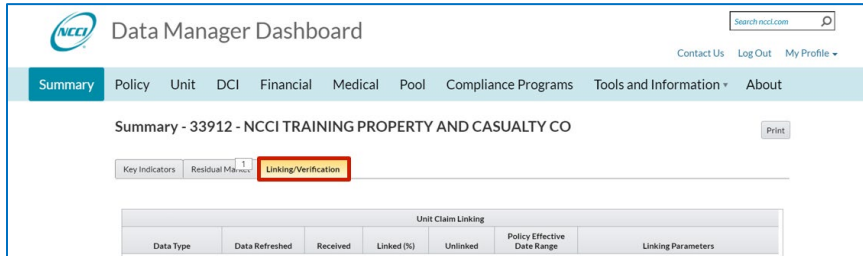
1. Unit Claim Linking - Generates claim linkages on a defined schedule between the source data and unit data.  
2. Unit Key Field Verification - Verifies reported key fields between the source data and unit data on receipt.



# Data Now Program (DNP) Data Linking and Comparisons

## Linking/Verification

This provides a method to check claim data across multiple data types.



## Unit Claim Linking

This section of the **DMD** Linking/Verification screen has information about Financial Calls #31 and #33, Detailed Claim Information (DCI), and Pool Data.

Unit Claim Linking						
Data Type	Data Refreshed	Received	Linked (%)	Unlinked	Policy Effective Date Range	Linking Parameters
31 Large Loss and Catastrophe Call	06/21/2020	409	0	<a href="#">409</a>	06/01/2016 - 09/30/2018	Carrier Group, Policy Nbr, Pol Eff Dt, Claim Nbr, State, Accident Dt
33 VA Coal Mine Large Loss	No Data Found					
DCI	04/19/2020	10,708	47.39	<a href="#">5,633</a>	04/01/2016 - 07/31/2018	Carrier Group/Code, Policy Nbr, Pol Eff Dt, Claim Nbr, Jurisdiction State, Accident Dt, Loss Cond Cov Code
Pool	06/21/2020	394	0	<a href="#">394</a>	06/01/2016 - 09/30/2018	Carrier Code, Policy Nbr, Pol Eff Dt, Claim Nbr, State, Accident Dt

This screen displays:

1. Data Refreshed—Displays the last time linking data was updated. Linking is updated on a scheduled basis depending on the data type.
2. Received—Displays the number of claims received and used to link.
3. Linked (%)—Displays the percentage of claims that linked.
4. Unlinked—Displays the number of claims that did not link and provides hyperlinks to view claim details.  
**Note:** If there are more than 1,000 claims, an option to download, view partial, or cancel will display.
5. Policy Effective Date Range—Displays the range of Policy Effective Dates used to link.
6. Linking Parameters—Displays the data elements that are used to link.
7. Unlinked Hyperlink—Access unlinked claim information by clicking the hyperlink.
8. If data is not available for a data type, a message “No Data Found” is shown.

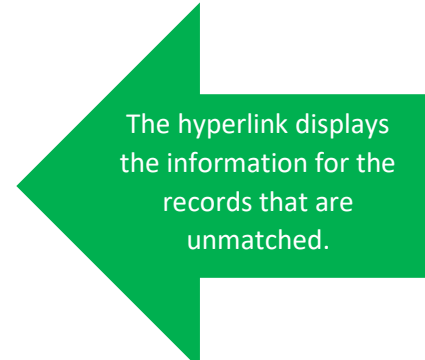


# Data Now Program (DNP) Data Linking and Comparisons

## Unlinked Claim Information

Financial-31 Large Loss - 33912 - NCCI TRAINING PROPERTY AND CASUALTY CO				
Financial-31 Large Loss Unlinked Claims as of 11/19/2023 06:14 AM				
For Reporting Group 33912				
Policy Effective Date Range: 11/1/2019 - 2/28/2022				
Policy Nbr	Policy Eff Dt	Claim Nbr	State	Accident Dt
<a href="#">WC1112388</a>	01/01/2022	CLAIM1	ID-11	10/03/2022
<a href="#">TESTWC2222</a>	01/01/2022	CLAIM2	IL-12	07/19/2022
<a href="#">TEST12335</a>	01/01/2022	TESTCLAIM45	RI-38	04/26/2022
WC11100	01/01/2022	CLAIMTEST123	TX-42	07/01/2022
WC1234567	12/31/2021	TESTINGCLAIM1	MO-24	01/03/2022
<a href="#">TESTPOL1</a>	<a href="#">12/31/2021</a>	TESTCLAIM567	NM-30	<a href="#">12/21/2022</a>
<a href="#">TESTPOL2</a>	<a href="#">11/14/2021</a>	<a href="#">CLAIM5678</a>	CT-06	<a href="#">12/06/2021</a>
<a href="#">WC111222333</a>	<a href="#">11/01/2021</a>	<a href="#">CLAIM112233</a>	IL-12	<a href="#">06/13/2022</a>
<a href="#">TEST000WC111</a>	<a href="#">10/26/2021</a>	<a href="#">CLAIM10987</a>	CT-06	<a href="#">12/20/2021</a>

1. Carrier Group, Policy Nbr, Pol Eff Dt, Claim Nbr, State, Accident Dt fields are used for linking.  
2. Bold red fields could not be used for linking.



- Data elements that could not be used for linking are highlighted in red
- This information allows you to compare your source system and determine the **drivers of the inconsistency**
- This example shows inconsistencies between Financial Call #31 and the Unit Statistical Data
- Print or download the information

## Unit Key Field Verification

This screen displays information for indemnity and medical records. The hyperlinks lead you to the Key Field Verification screens in the **Indemnity Data Collection** tool or **Medical Data Collection** tool.

Unit Key Field Verification						
Data Type	Data Refreshed	Received	Matched (%)	Unmatched	Policy Effective Date Range	Verification Parameters
<a href="#">Indemnity</a>	07/21/2020	5,398	98.65	73	07/01/2016 - 10/31/2018	Carrier Code, Policy Nbr, Pol Eff Dt, Claim Nbr
<a href="#">Medical</a>	07/28/2020	262,331	98.7	3,493	07/01/2016 - 10/31/2018	Carrier Code, Policy Nbr, Pol Eff Dt, Claim Nbr

1. Unit Claim Linking - Generates claim linkages on a defined schedule between the source data and unit data.  
2. Unit Key Field Verification - Verifies reported key fields between the source data and unit data on receipt.

## Key Field Verification Screen for Policy and Unit Data

Selecting either the Indemnity or Medical hyperlinks displays the Key Field Verification screen. Here you can locate your policy linking results in addition to the claim linking results.

Data is refreshed with each file submission.						Last Refresh 01/01/2024
Data Type	Verification Parameters	Key Fields Reviewed	Key Fields Found	Percentage Found	Key Fields Not Found	
Policy	Carrier Code, Policy Number	7,265	7,255	100%		10
Policy	Carrier Code, Policy Number, Policy Effective Date	7,265	7,246	100%		19
Unit	Carrier Code, Policy Number, Policy Effective Date	6,942	6,926	100%		16
Unit	Carrier Code, Policy Number, Policy Effective Date, Claim Number	6,942	6,805	98%		137



# Data Now Program (DNP) Data Linking and Comparisons



As a reminder, the Unit Key Field Verification in **DMD** and the Indemnity and Medical Key Field Verification screens do not consider Jurisdiction State, but we want to reiterate the importance of Jurisdiction State as a claim linking field.

## Chapter 5: How to Address Data Linking Issues

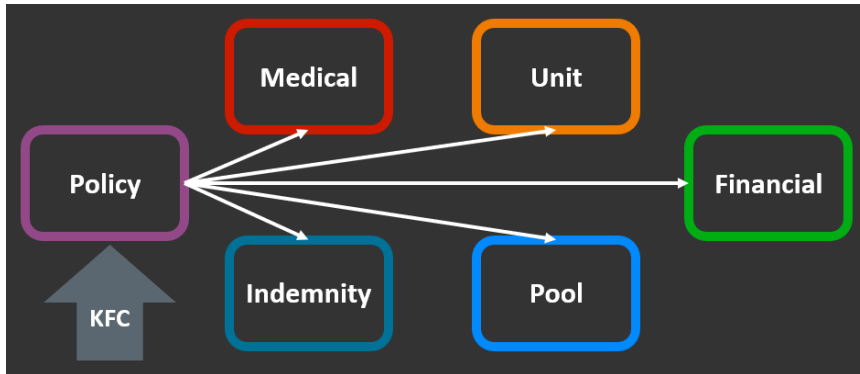
### Addressing Linking Issues

Contact your company's assigned validator.



**Important!** If you have identified linking issues, contact your company's data validator to discuss and evaluate the actions needed.

### Updates to Data Linking Fields



To avoid any reporting issues, be sure to update the linking fields consistently across all data types.

#### Example

If a key field change (KFC) is made to update the Policy Number on Policy Data, then the Policy Number **must** be updated on all other data types.



## Source System Changes or Updates

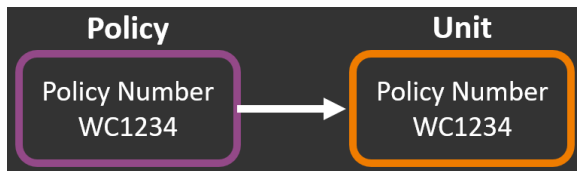
Considerations:

- What happens if your company converts to a new system?
  - You will need to recertify depending on the data type.
- Who do you notify at NCCI?
  - Contact your data validator.
- What happens if your company changes data reporting vendors?
  - If no key field changes are made, then you do not need to contact NCCI. If key field changes are made, contact your data validator.
- What happens if your company plans to change the Policy/Claim Number format for future policies?
  - The format **MUST** be consistent across all data types.

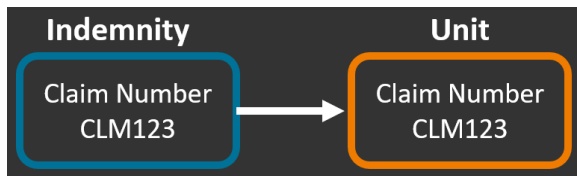
## Chapter 6: Linked Data Usages

### Expected Data

Policy Data tells us to expect one or more units depending on the states on the policy.

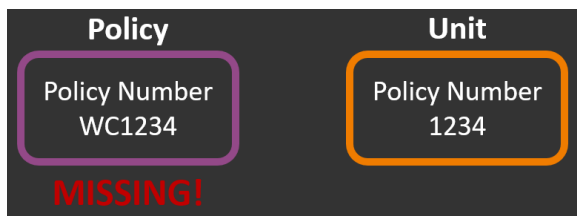


Here's another example of expected data: If a claim was submitted in medical or indemnity, we would expect Unit Data at the appropriate time.



### Impact of a Policy Mismatch

If unit linking data does not match the policy, NCCI systems assume that the Policy Data is missing.







# Data Now Program (DNP) Data Linking and Comparisons

## DMD—Unmatched Units

**DMD**, under Unit and then Quality, has a tab for Unmatched Units. Here you can find hyperlinks to the units by policy year.

Summary - 33912 - NCCI TRAINING PROPERTY AND CASUALTY CO

Unmatched Units Received as of 11/01/2023 01:11 AM

Due Year/Month	Policy Effective Month	Total (Data Grades 0-5)	Matched	Unmatched
2023		3,559	3,538	21
2022		4,031	3,995	36
2021		5,244	5,210	34

Unmatched units may indicate the:

- Policy is missing
- Policy Exposure State is missing
- Policy is cancelled flat, but the unit has premium greater than \$0, with or without claims

## DMD—Unmatched Units

Selecting the Unmatched hyperlink displays a list of unmatched units.

Unit - 33912 - NCCI TRAINING PROPERTY AND CASUALTY CO

Unmatched Units Received - Unmatched as of 11/01/2023 01:11 AM

Carrier Code	Due Mo/Yr	Pol Eff Month	Pol Nbr	Pol Eff Dt	State	Rpt Nbr	Corr Seq Nbr	Risk ID	Admin Nbr
10022	01/2023	May	WC123456789	05/11/2021	LA-17	1	0		12345A678
10022	01/2023	May	WC123456790	05/20/2021	FL-09	1	0		12345B679
10022	03/2023	Jul	WC123456794	07/10/2021	IN-13	1	0		12345C680
10022	03/2023	Jul	WC123456801	07/24/2021	CO-05	1	0		12345B681
10022	03/2023	Jul	WC123456823	07/24/2021	FL-09	1	0		12345A678
10022	03/2023	Jul	WC123456833	07/24/2021	IN-13	1	0		12345B693
10022	03/2023	Jul	WC123456795	07/24/2021	KY-16	1	0		12345C685
10022	03/2023	Jul	WC123456830	07/24/2021	TX-42	1	0		12345B689
10022	06/2023	Oct	WC123456903	10/01/2021	NV-27	1	0		12345C694
10022	07/2023	Nov	WC123456930	11/05/2021	GA-10	1	0		12345B696

To address the unmatched units, you may need to:

- Process a key field change to link the Policy and Unit Data
- Add a missing state to the Policy Data
- Reinstate a policy if cancelled flat or delete the Unit Data

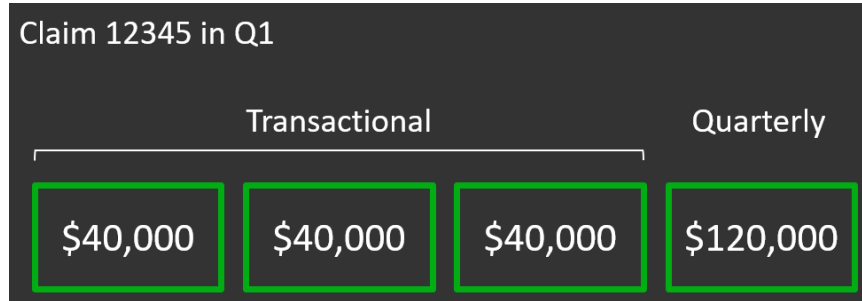


# Data Now Program (DNP) Data Linking and Comparisons

## Indemnity Payments

Linked data is used within data types.

**Example:**

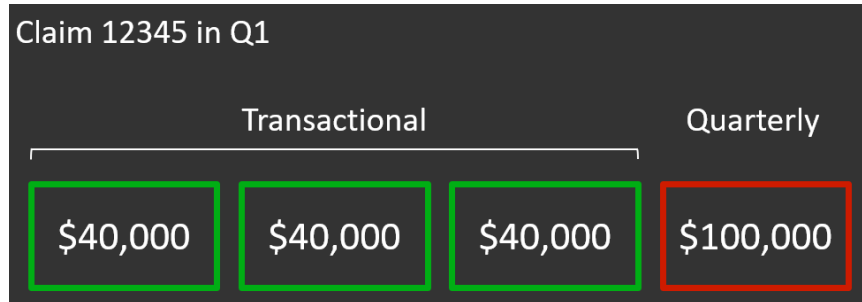


Transactional had three \$40,000 payments reported. Would expect \$120,000 in payments for Quarterly.

The Indemnity Data Call Transactional Record and Quarterly Record both include indemnity payments. Transactional Record payments should match the Quarterly Record payments.

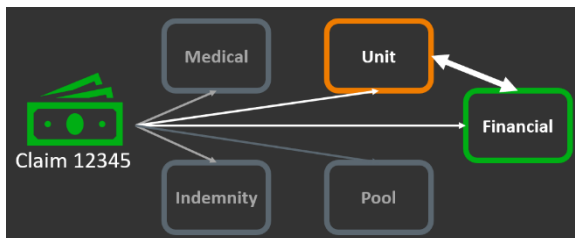
**Example:**

In this example, the Quarterly Record had a quarterly change of \$100,000, but the Transactional Record had three payments of \$40,000. NCCI would suspect one of the sources is inaccurate.



## Chapter 7: Data Comparisons

### Financial vs. Unit Statistical Losses



NCCI analysts perform comparisons between Unit Data and Financial data. Claim linking between Unit Data and Financial data assists in this effort.

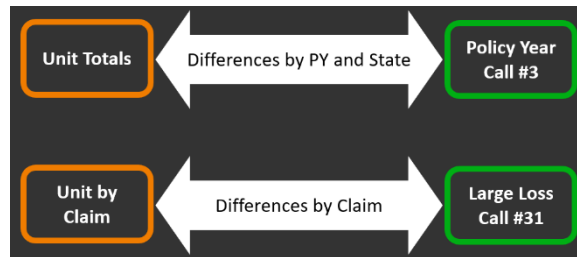


## Data Now Program (DNP) Data Linking and Comparisons

### Comparisons

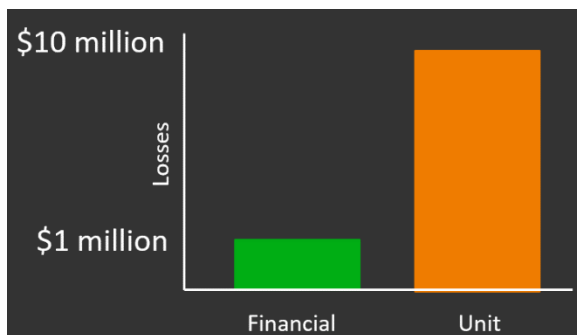
NCCI compares:

- Unit Data by policy year and state to the Financial data Policy Year Call #3
- Unit Data individual claims to the Financial data Large Loss Call #31



### Inconsistency Could Mean Inaccurate Data

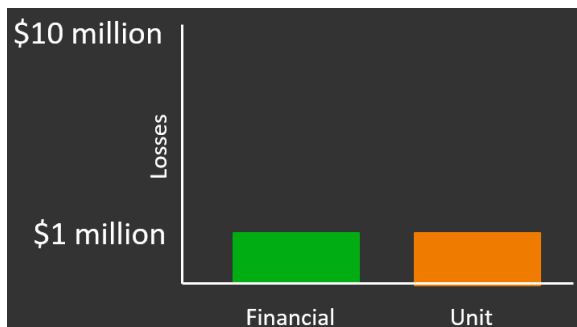
Example: Reported data shows \$10 million in losses in the Unit Data compared to \$1 million in the Financial data.



In this fictitious example, after NCCI alerted the carrier to the discrepancy, the carrier discovered that a policy should have been submitted as a large deductible policy.

This is important because large deductible losses are NOT included in Financial Call #3.

The carrier submits corrections to label the unit as a large deductible policy. The two sources now align:



### FinStat Analysis

This is an example of a FinStat analysis that NCCI sends to carriers. This is how discrepancies are communicated.



## Data Now Program (DNP) Data Linking and Comparisons

### Example

State	PY	COMPANY STANDARD PREMIUM				TOTAL (INDEMNITY + MEDICAL) PAID+CASE LOSSES				INDEMNITY INCURRED CLAIM COUNTS			
		FIN	STAT	DIFF	% DIFF	FIN	STAT	DIFF	% DIFF	FIN	STAT	DIFF	% DIFF
AL	2018	11,361,911	8,651,155	2,710,756	31	4,659,663	4,532,444	127,219	3	120	118	2	2
MD	2018	46,563,333	37,340,889	9,222,444	25	36,992,556	32,766,572	4,225,984	13	876	676	200	30
MS	2020	6,256,477	8,253,907	-1,997,430	-24	1,598,622	1,656,325	-57,703	-3	29	32	-3	-9
SC	2019	10,325,232	10,320,999	4,233	0	8,621,626	2,215,465	6,406,161	289	133	131	2	2
VA	2021	18,693,222	18,686,526	6,696	0	7,456,565	15,932,362	-8,475,797	-53	123	369	-246	-67

In this example, NCCI inquires about the premium, losses, and claim counts for Maryland in Policy Year 2018. The Financial data is significantly higher than the Unit Data for all three discrepancies.

Explanations for these types of differences can vary:

- Missing Unit Data
- Incorrect Financial Data Reporting

The timing of a FinStat could also cause discrepancies. In this example, the total losses in South Carolina for Policy Year 2019 are higher in the Financial data than in the Unit Data. This could be caused by claims missing from the Unit Data, or the next report level on units was not due at the time of the FinStat run.

### Additional Cross-Data Type Comparisons

#### DSR Review

The Designated Statistical Reporting (DSR) analysis provides a comparison between the Policy Year Call (Call #3 or #3A—Assigned Risk) and Unit Statistical premium data. This analysis uses extended exposures and is outlined in the *Financial Call Reporting Guidebook*. To determine the DSR Level Premium, extending exposures essentially rerates policies using the NCCI-approved loss costs or rates instead of company rates for individual class codes. The DSR analysis looks at the derived premium amounts between the two sources as well as the average deviation between Company Standard and DSR Level Premiums.

#### Pool Data to Financial Call Data Comparison

A Pool Financial analysis compares a complete year’s worth of a data provider’s national Pool Data to the Financial Call data reported and valued as of 12/31/XX. The report compares the NP-4—premiums and losses to the Assigned Risk Policy Year Call (Call #3A), and the NPX—Indemnity Claim Counts are compared to the Assigned Risk Accident Year Call (Call #5A).

The Pool Financial analysis is compiled and analyzed on every data provider that has NP-4 premium within the observed policy years. This analysis occurs in the second quarter of a given calendar year once the current Financial Call valuation is submitted.



## Data Now Program (DNP) Data Linking and Comparisons

### Indemnity and Medical Data to Unit Data

When running a comparison of either Indemnity data to Unit Data or Medical data to Unit Data, NCCI reviews both data sources to ensure the claims are included in both data sources.

We also review both to make sure the claims link correctly in the key fields.



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