



Ratemaking Resource Guide



Ratemaking requires analyzing several key components, including on-levels, development, trend, and expenses. For each of these components, this Ratemaking Resource Guide will:

- Highlight essential NCCI resources
- Provide background information and definitions
- Offer reference information related to NCCI rate filings

Notes:

- For NCCI filing activity, see the latest **Status of Rate Revisions** on NCCI's [Circulars](#) page.
- For a detailed summary of filing information and data across all NCCI states, see the [Summary of Loss Cost/Rate Filing Information](#) exhibit.

On-levels



Resources

[ASB Exhibit 2 – Premium Level Changes](#) (updated in March, June, November)

[ASB Exhibit 3 – Benefit Level Changes](#) (updated in March, June, November)



Background

On-level factors adjust historical premium and loss data to the current premium and benefit levels, facilitating the comparison of data across different time periods. Historical premium and benefit level changes are the building blocks for calculating on-level factors, which can be found in **ASB** Exhibits 2 and 3. For the most recent premium and benefit level changes not yet incorporated into the **ASB**, reference the latest NCCI rate filing.

ASB Exhibit 2 provides a history of approved bureau level premium changes. When using this exhibit, it is important to understand the premium base associated with each bureau level change. For NCCI states, bureau level premium is at the Designated Statistical Reporting (DSR) level. NCCI DSR Level Premium is the earned premium that would result if policies were written using NCCI loss costs or rates. Therefore, when calculating company-specific on-levels, further adjustment may be necessary.

Additionally, bureau level premiums (and their changes) can vary with respect to expenses. In most states, bureau rating values are loss costs (also referred to as pure premiums), which reflect the cost of providing indemnity and medical benefits. Most NCCI loss cost states also include a provision for loss-based expenses, such as loss adjustment expenses or other loss-based assessments. In states where a rate is filed by the bureau, this rate reflects all premium-based and loss-based expenses, in addition to the benefit costs. See the Expenses section for more details.

ASB Exhibit 3 provides a history of the filed benefit level changes by state. Such changes may result from annual updates in medical reimbursement levels or from changes to the administration of the workers compensation system, including benefit levels, that may result from regulatory, legislative, or judicial actions.

The effective dates provided in Exhibit 3 generally correspond to the date that the revised benefit became applicable, which may not be the same as the effective date of the loss cost/rate filing in which the benefit change is included.



NCCI Rate Filings

NCCI premium and loss on-level factors are calculated in Appendix A-I of each state's annual rate filing. The factors are also available for reference in the [Trend Information](#) exhibit.

Notably, NCCI-calculated premium on-level factors include other adjustments in addition to premium level changes. These adjustments may include but are not limited to:

- A factor to remove expenses from the reported DSR level premium
- An experience rating off-balance factor
- Several additional adjustments related to the assigned risk market, if applicable

In states where assigned risk rates are filed, separate on-level factors are calculated for the voluntary and assigned risk markets, which are combined into a statewide on-level factor.

NCCI-calculated loss on-level factors reflect the benefit level changes approved in historical loss cost or rate filings. For each benefit change incorporated in the loss on-levels, a detailed analysis can be found in the filing where the benefit change was first introduced, typically in Appendix C.

Development



Resources

[ASB Exhibit 9 – Unlimited Loss Development Factors](#) (updated in March)

[Loss Development Exhibits](#) (updated for each state shortly after NCCI submits the filing)



Background

Development factors are used to project reported losses and premium to their ultimate levels. Loss development occurs as claim payments are made and case reserve estimates change. Since workers compensation is a long-tailed line of business, losses have the potential to develop for many years after an injury occurs. Premium development is primarily based on payroll audits. Similar to on-levels, the application of development factors facilitates the comparison of data across different time periods. Development triangles are available in **ASB** Exhibit 9 and the Loss Development Exhibits.

The information offered in each resource is compared in the table below; some state-specific exceptions apply.

Category	ASB Exhibit 9	LDE
Aggregation Method	Accident Year	Accident Year, Policy Year
Loss Type	Indemnity, Medical, Combined	Indemnity, Medical, Combined
Loss Base	Paid, Paid+Case	Paid, Paid+Case
Loss Limitation	Unlimited	Unlimited
Tail Factors	Latest five 19th-to-ultimate factors	Latest ten (8th–19th)-to-ultimate factors
States Included	NCCI and other bureau states	NCCI states
Format	Combined in one Excel file and PDF	Separate Excel file for each state

In addition to loss development triangles, the LDEs include the following exhibits:

- Base premium and loss dollar amounts
- Closed-to-total claim ratio triangles
- Defense and Cost Containment Expense (DCCE) ratio triangles
- Loss-to-claim ratio triangles
- Paid to paid+case ratio triangles
- Policy year premium development triangles

These additional exhibits support other ratemaking analyses, such as determining a DCCE ratio or analyzing claim and cost patterns. To dive deeper into a diagnostics analysis for a given state, the [Claim and Cost Diagnostics](#) exhibits are available on the same page as the LDEs. They can help identify whether there has been a change in claim closure rates, claim payment patterns, or case reserve levels in a given state.



NCCI Rate Filings

The development factors included in each state's filing depend on the filing methodology and development selections used in that state. For example, a filing that utilizes a paid loss base and NCCI's large loss limiting procedure will include limited paid loss development factors. For more details on NCCI's development considerations and selections, refer to Appendix A-II of the applicable filing. A summary of high-level development selections for all NCCI states can be found in the [Summary of Loss Cost/Rate Filing Information](#) exhibit. The filing-specific age-to-ultimate development factors are also available for reference in the [Trend Information](#) exhibit.

Trend



Resources

[Trend Information](#) (updated for each state shortly after NCCI submits the filing)



Background

Trend factors are necessary to account for how loss costs change over time; they are used to forecast the extent to which future experience will differ from historical experience. In workers compensation, loss ratio trend factors measure anticipated changes in the amount of indemnity and medical benefits as compared with anticipated changes in the amount of workers' wages.

NCCI's Trend Information exhibit provides the frequency, severity, and loss ratio calculations associated with each state's rate filing trend analysis. Data adjustments such as on-leveling and development are necessary to perform a trend analysis; thus, certain components of the exhibit reflect NCCI ratemaking methodologies and selections for each state. These include:

- Large loss limiting (most states)
- Loss and premium on-level factors
- Selected loss base (paid, paid+case, average)
- Ultimate loss, premium, and claim count development factors
- Wage adjustment factors

Frequency and severity values are also provided in NCCI's Frequency and Severity Results by State; however, there are key differences in the calculation compared to the Trend Information exhibit. The calculations are compared in the table below.

Category	Frequency and Severity Results by State	Trend Information
Aggregation Method	Calendar-Accident Year	Policy Year, Calendar-Accident Year
Losses (for severity)	Unlimited, Developed-to-ultimate, Medical-only losses removed ¹	Limited (most states), Developed-to-ultimate, On-leveled, Wage-adjusted ²
Premium (for frequency)	On-leveled, Wage-adjusted ²	On-leveled, Wage-adjusted ²
Claim Counts (for frequency and severity)	Lost-time claim counts developed-to-ultimate	Lost-time claim counts developed-to-ultimate

¹ The result is medical "lost-time" severity, or the average medical cost of lost-time claims.

² Wage adjustment factors adjust premium and losses to a common wage level, resulting in frequency and severity changes in excess of wage inflation. Losses are not wage-adjusted in the Frequency and Severity Results by State.



NCCI Rate Filings

NCCI's trend analysis and selections can be found in Appendix A-III of each state's filing. The appendix details the various considerations and data adjustments, if applicable, underlying the trend selections. A summary of loss ratio trend selections across all states is included in the [Summary of Loss Cost/Rate Filing Information](#) exhibit.

Expenses



Resources

[ASB Exhibit 6](#) – Taxes, Assessments, and LAE (updated in March, November)

[Tax and Assessment Directory](#) (updated monthly)

[Underwriting Results by State](#) (updated in March, October, December)

[Loss Development Exhibits](#) (updated for each state shortly after NCCI submits the filing)

[Countrywide Expense Analysis](#) (updated in July)



Background

In ratemaking, expense provisions are necessary to ensure that premiums are adequate to cover the operational costs of the insurance company. Types of expense provisions include:

- Loss Adjustment Expenses
- Production and General Expenses
- Taxes, Licenses, and Fees
- Profit and Contingencies

Depending on the state, NCCI's filed rating values may be loss costs or rates. In rate states, full rates are published to reflect all expenses in addition to the loss costs. In loss cost states, carriers must include any appropriate expenses in their filed loss cost multiplier to produce a full rate.

The resources listed can be used to:

- Reference the expense provisions included in each state
- Learn about some of NCCI's filed expense provisions
- Review historical expense ratios
- Perform an independent expense analysis

ASB Exhibit 6 summarizes the expense provisions incorporated into the latest approved bureau advisory rate or loss cost level by state.

The [Tax and Assessment Directory](#) provides the latest approved tax and assessment provisions included in the bureau advisory rate/loss cost levels. The **Tax and Assessment Directory** also includes a history of all taxes and assessments by state (regardless of inclusion in bureau rates/loss costs) and their statutory references.

Historical expense ratios derived from NAIC data are provided in [ASB Exhibit 4 – Calendar Year Experience](#) and are further broken out in the [Underwriting Results by State](#).

State-specific DCCE ratio triangles are included in the [Loss Development Exhibits](#).

NCCI's annual countrywide expense analysis includes a review of Production Expenses, General Expenses, and Adjusting and Other Expenses (AOE). Written reports are available in the Countrywide Expense Analysis section of the [Loss Cost/Rate Filing Information](#).



NCCI Rate Filings

The expense provisions included in NCCI filed rating values are located in Exhibit II of each state's filing.