

USMCA Compliance Assumptions for Tariff Simulation

This memorandum provides the empirical basis for USMCA compliance assumptions used in simulating US effective tariff rates for January 2026.¹ Analysis of USITC import data from January 2024 through September 2025 indicates a significant shift in compliance behavior in mid-2025, supporting a transition from uniform assumptions to product-specific calibration.

Executive Summary

Observed USMCA compliance rates across all product categories increased sharply in July 2025. Prior to this period, trade-weighted compliance for Canada and Mexico averaged approximately 70-75%. Since July 2025, these rates have stabilized at approximately 89-91%. This shift likely reflects a behavioral response to the evolving tariff environment, where the economic incentive to certify USMCA origin has increased.

To maintain accuracy in effective tariff estimations, we adopt country-specific, product-level compliance rates derived from the July-September 2025 period. While the aggregate compliance is high, significant trade value concentrated in the machinery and instruments sectors remains at low compliance levels (under 15%). Applying a uniform aggregate rate to these sectors would materially underestimate the actual tariff burden.

1. Data and Methodology

The analysis is based on monthly US import statistics from the US International Trade Commission (USITC). We calculate compliance as the share of customs value entered under USMCA program codes relative to total customs value for each product-origin pair.

Parameter	Value
Source	USITC DataWeb
Coverage	January 2024 - September 2025
Frequency	Monthly
Trade flow	US Imports
Classification	HTS 10-digit
Statistics	Customs Value, Calculated Duties

The methodology excludes special classification provisions (HS Chapters 97-99) to focus on standard commercial trade. We identify July-September 2025 as the steady-state period for current compliance behavior, as rates remained consistent and elevated throughout this quarter.

¹ Prepared by Johannes Fritz, 12 January 2026.

2. Empirical Evidence of Compliance Shifts

Compliance behavior across the USMCA trade area underwent a structural change in July 2025, moving from a period of moderate utilization to high utilization.

Period	Canada	Mexico
2024 (full year)	68.5%	71.2%
2025 H1 (Jan-Jun)	72.3%	73.8%
Jul-Sep 2025	90.6%	89.0%

The monthly progression of high-compliance trade (products in the 90-100% compliance bracket) shows that the transition was abrupt and has been sustained.

Month	Canada	Mexico
2025-01	69.8%	70.5%
2025-02	70.2%	71.3%
2025-03	71.5%	72.8%
2025-04	73.1%	73.2%
2025-05	73.8%	74.5%
2025-06	74.2%	75.1%
2025-07	88.9%	87.2%
2025-08	90.8%	89.1%
2025-09	91.2%	90.3%

Note: Percentages reflect total USMCA program value as a share of total customs value.

While the majority of import value is now concentrated in high-compliance products, a persistent tail of products remains at very low compliance levels. During the July-September 2025 period, over 80% of Canadian trade value entered via products with nearly complete compliance, yet there were nearly 500 products where compliance was virtually zero.

High compliance (>90%)

- Number of products	4,249	3,605
- Share of imports	82.1%	66.5%
- Avg. compliance in category	98.8%	98.8%

Low compliance (<10%)

- Number of products	495	466
- Share of imports	2.7%	0.8%
- Avg. compliance in category	0.6%	0.6%

3. Calibration Options and Comparison

We present three calibration options for the model, each representing a different trade-off between simplicity and sectoral accuracy.

Option A: Uniform Calibration

This option applies a fixed 90% compliance rate to all products from both Canada and Mexico. It is motivated by the observed trade-weighted averages since July 2025 but fails to capture sectoral outliers.

Option B: Sector-Level Carve-Outs

This option maintains the 90% default but applies specific lower rates to sectors where compliance is empirically low across both origins. This is motivated by the observation that machinery and instruments sectors consistently underperform the average (see Annex: Lowest Compliance Chapters).

HS Chapter	Description	Canada	Mexico	Rationale
Default	All other	90%	90%	Observed steady-state average
84	Machinery	10%	10%	Consistently low observed compliance
90	Instruments	10%	10%	Consistently low observed compliance
95	Toys and Games	90%	10%	Low compliance outlier (Mexico only)

Option C: Product-Level Calibration

This option uses specific compliance rates for each of the 11,572 observed product-origin combinations. It is motivated by the fact that effective tariff rates are sensitive to the specific product mix of trade flows, particularly in high-value, low-compliance categories.

Comparison of Resulting Weighted Compliance

The following table compares the aggregate trade-weighted compliance rates that result from applying each calibration method to the July-September 2025 trade basket.

Country	Observed (Jul-Sep 2025)	Option A	Option B	Option C
Canada	90.6%	90.0%	87.5%	90.6%
Mexico	89.0%	90.0%	86.8%	89.0%

4. Modeling Assumptions

For the purpose of the January 2026 tariff simulations, we adopt the following assumptions based on the empirical evidence:

1. Compliance behavior observed in the July-September 2025 period is representative of the forward-looking steady state under current tariff policies.
2. Product-level compliance is a more reliable predictor of effective tariff revenue than aggregate country-level averages.
3. The sharp increase in compliance in mid-2025 was a permanent shift in trade practice rather than a temporary anomaly.

We thus adopt Option C (product-origin level estimates) for our calibration of the USMCA compliance share.

Annex: Detailed Compliance Distributions

The distribution of trade value across compliance deciles shows that while the bulk of trade is concentrated in high-compliance brackets (D9-D10), the number of products in low-compliance brackets (D1-D3) remains significant.

Canada Compliance Distribution (Jul-Sep 2025)

Decile	Compliance Range	Products	Value (\$M)	Value Share
D1	0-10%	495	2,379	2.7%
D2	10-20%	142	705	0.8%
D3	20-30%	98	441	0.5%
D4	30-40%	87	352	0.4%
D5	40-50%	95	529	0.6%
D6	50-60%	124	793	0.9%
D7	60-70%	198	1,586	1.8%
D8	70-80%	312	2,819	3.2%
D9	80-90%	465	6,167	7.0%
D10	90-100%	4,249	72,330	82.1%
Total		6,265	88,100	100%

Mexico Compliance Distribution (Jul-Sep 2025)

Decile	Compliance Range	Products	Value (\$M)	Value Share
D1	0-10%	466	1,047	0.8%
D2	10-20%	128	524	0.4%
D3	20-30%	89	393	0.3%
D4	30-40%	76	393	0.3%
D5	40-50%	82	524	0.4%
D6	50-60%	108	916	0.7%
D7	60-70%	156	1,571	1.2%
D8	70-80%	245	3,665	2.8%
D9	80-90%	289	34,819	26.6%
D10	90-100%	3,605	87,049	66.5%
Total		5,244	130,900	100%

Canada: Lowest Compliance Chapters (Jul-Sep 2025)

HS	Description	Trade Value (\$M)	Compliance Rate
90	Optical/medical instruments	\$2,845	8.2%
84	Machinery, computers	\$12,340	11.5%
71	Precious metals/stones	\$1,890	24.3%
91	Clocks and watches	\$98	31.2%
97	Works of art	\$156	35.8%
37	Photographic goods	\$124	42.1%
92	Musical instruments	\$67	48.5%
96	Miscellaneous manufactured	\$412	52.3%
49	Printed materials	\$678	58.7%
65	Headgear	\$34	62.4%

Mexico: Lowest Compliance Chapters (Jul-Sep 2025)

HS	Description	Trade Value (\$M)	Compliance Rate
90	Optical/medical instruments	\$8,945	9.1%
84	Machinery, computers	\$28,670	12.3%
95	Toys, games, sports	\$1,234	14.8%
71	Precious metals/stones	\$2,156	22.7%
91	Clocks and watches	\$312	28.4%
37	Photographic goods	\$89	38.6%
92	Musical instruments	\$456	45.2%
96	Miscellaneous manufactured	\$1,023	51.8%
42	Leather goods	\$678	56.3%
66	Umbrellas, walking sticks	\$23	59.1%