
Regional Data Libraries 2019-10 Release Notes

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Documentation

The latest version of the documentation for these products can always be found at the aPriori Support HelpCenter (requires registration): <https://support.apriori.com/hc>

Compatibility

aPriori Regional Data Libraries 2019-10 are available for both aPriori Professional 2019 R2 and aPriori Professional 2019 R1 SP2. Please contact aPriori support for the correct files to import into your deployment. This document applies to both aPriori 2019 R2 and aPriori 2019 R1 SP2.

Note: Some features described are part of separately licensed modules and may not be included in all deployments. Please more information, please contact your aPriori Account Representative or aPriori Support.

What's New in Regional Data Libraries 2019-10

Wage Grades

The Regional Data Libraries 2019-10 compatible with aPriori 2019 R2 have been updated to work seamlessly with the new Wage Grades functionality introduced in aPriori 2019 R2. This functionality has no impact on the values used for labor rate for a given machine, but, as summarized here, it does have several major impacts on the Regional Data Libraries (RDLs) data transparency and management. For more details about the impact of RDL updates, see the aPriori Professional 2019 R2 Release Notes.

In terms of transparency, you can now see key assumptions, such as skill level definitions and the assumed skill level for each process, in the Regional Data Library VPEs' Skill Level, Wage Grade, and Wage Grade Association tables. The algorithms that aPriori uses to populate these tables have not changed from the previous release. In other words, the assumptions that you can now see are not new, they are simply exposed.

In terms of data management, VPE managers can now manage labor rates by using the new Wage Grades functionality. The functionality greatly increases flexibility when using Regional Data Library data. A key change is that VPE managers can now update the labor rate assumptions for a process or a machine to align with skill level while maintaining inheritance to the labor rates published in Regional Data Libraries. For example, in Regional Data Libraries, the 3-Axis Mill process uses a skill level 5 (Advanced Skills and job experience, standard vocational training). To instead use a level 6 (Advanced Skills and job experience, specialized training and certification), simply make the change in the Wage Grade Association table. The labor rates for those machines are automatically updated to use the new assumption. Furthermore, assuming no machine specific overrides are made, the 3-Axis Mill machines continue to receive updated labor rates for the skill level 6 assumption.

Plastic Compositions

The Plastic Molding and Assembly Molding process groups now include seven additional material compositions:

- Polyphenylenesulfide
- Polyphenylenesulfide GF30
- Polyphenylenesulfide GF40
- Polybutyleneterephthalate
- Polybutyleneterephthalate GF30
- Polybutyleneterephthalate GF40
- Acrylic (PMMA)

Economic Updates

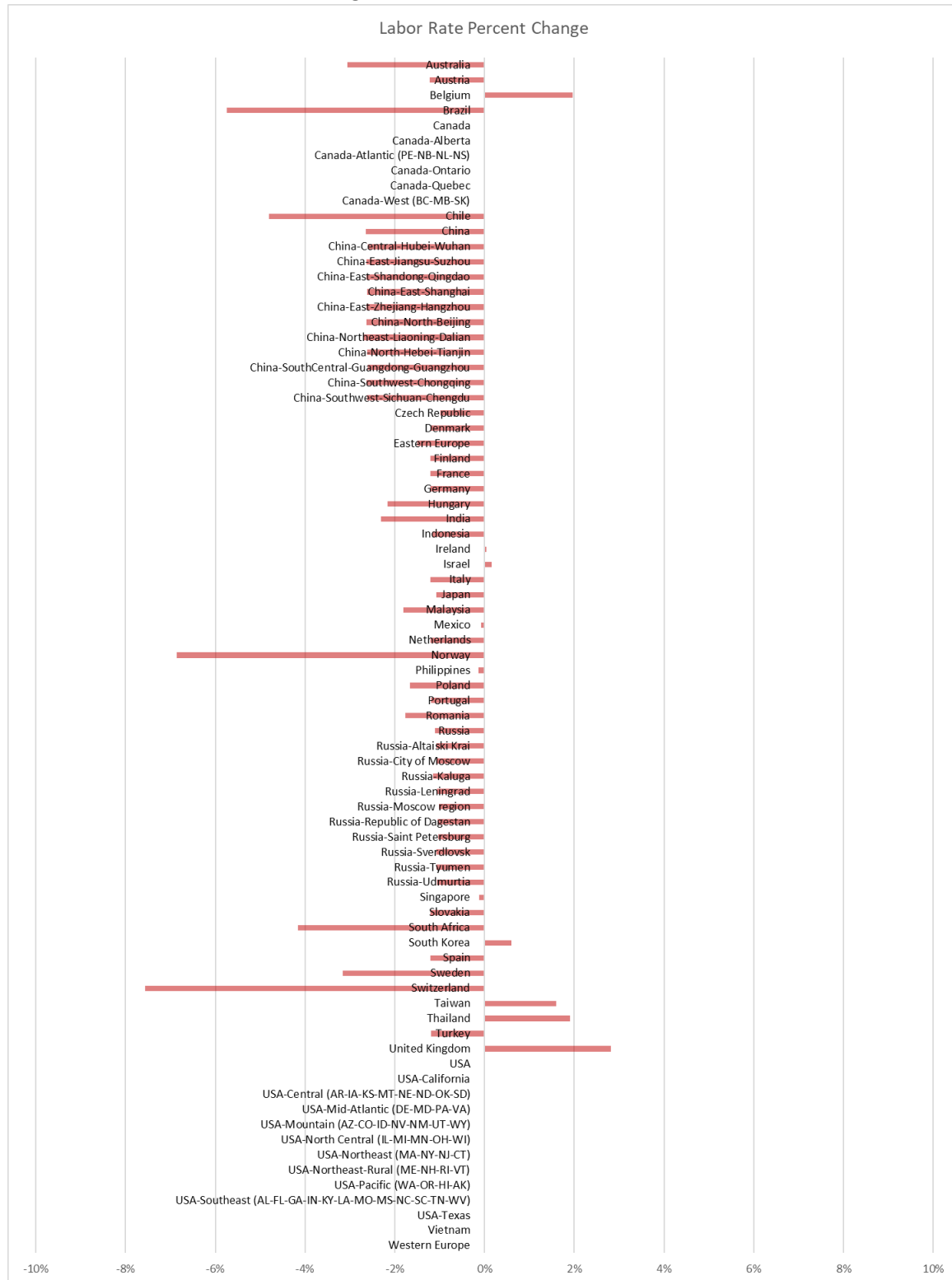
Exchange Rates

Since the Regional Data Libraries 2019-08 release, most currencies have remained relatively stable when compared to the US Dollar. Changes to exchange rates are important because labor rates changes, which are collected in local currencies and converted to USD, track exchange rate changes.

Currency Name	Currency Symbol	Current Exchange Rate	Percent Change from 2019-08
Australian Dollar	AUD	0.68256	-3.1%
Brazilian Real	BRL	0.25143	-5.8%
Canadian Dollar	CAD	0.76556	0.0%
Chilean Peso	CLP	0.00138	-4.8%
Chinese Yuan Renminbi	CNY	0.14148	-2.6%
Czech Koruna	CZK	0.04352	-1.0%
Danish Krone	DKK	0.14847	-1.2%
Euro	EUR	1.10918	-1.2%
Hungarian Forint	HUF	0.00338	-2.2%
Indian Rupee	INR	0.01414	-2.6%
Indonesian Rupiah	IDR	0.00007	-1.4%
Japanese Yen	JPY	0.00919	-1.1%
Korean Won	KRW	0.00086	0.6%
Malaysian Ringgit	MYR	0.23889	-1.8%
Mexican Peso	MXN	0.05254	-0.1%
Norwegian Krone	NOK	0.10863	-6.9%
Philippine Peso	PHP	0.01955	-0.1%
Polish Zloty	PLN	0.25951	-1.7%
Pound Sterling	GBP	1.28541	2.8%
Romanian Leu	RON	0.23329	-1.8%
Russian Ruble	RUB	0.01570	-1.1%
Shekel (Israel)	ILS	0.28294	0.1%
Singapore Dollar	SGD	0.73409	-0.1%
South African Rand	ZAR	0.06876	-4.2%
Swedish Krona	SEK	0.10319	-3.2%
Swiss Franc	CHF	1.00430	-1.4%
Taiwan Dollar	TWD	0.03272	1.6%
Thai Baht	THB	0.03307	1.8%
Turkish Lira	TRY	0.17457	-1.3%
United States Dollar	USD	1.00000	0.0%
Vietnamese Dong	VND	0.00004	0.0%

Labor Rates

The chart shows all labor rate changes relative to the 2019-08 release.

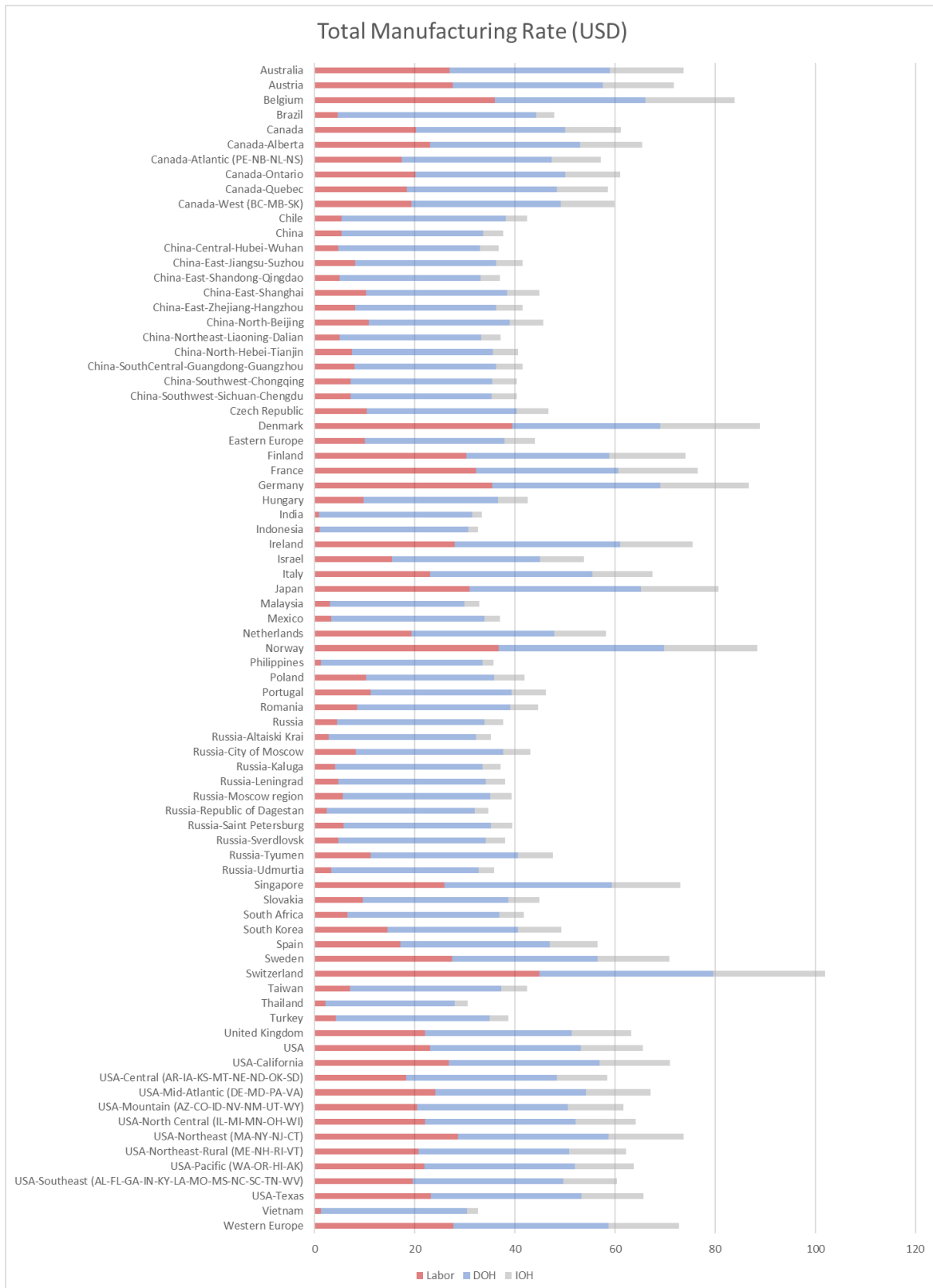


Total Manufacturing Rates

Direct overhead rates are consistent with the prior release. Indirect overhead rates changes are correlate to the labor rate changes because many indirect overhead support staff wage data is the same as the labor wage data. The change in total manufacturing rates (labor rate + direct overhead rate + indirect overhead rate) generally aligns with the changes to labor rates. However, due to the relatively unchanged direct overhead rates, the magnitude of the manufacturing rate change is slightly smaller than the labor rate changes. The chart shows the relative manufacturing rate changes from 2019-08 to 2019-10.



This chart represents the average total manufacturing rate for each region in the Regional Data Libraries 2019-10 release.



Material Rates

The material rate changes in the 2019-10 release represent fluctuations in the materials markets; there were no material price assumption changes in this **release**. In general, the metals market saw minor fluctuations in costs with no discernable or significant trends. The table shows the variation by material type between the 2019-08 to 2019-10 RDL releases.

Ferrous Metals		Non-Ferrous Metals	
Cast Iron	-7%	Aluminum	-2%
Steel	5%	Brass	-5%
Stainless Steel	5%	Bronze	-4%
		Copper	-3%
		Heat Resistant Super Alloys	12%
		Titanium	-8%
		Zinc	-12%

The plastics material market saw minimal changes between the 2019-08 and 2019-10 RDL releases; all material types saw no change except Polypropylene, which increased about 3%, and Polystyrene, which increased about 2%.

Low- and High-Volume Material Rate Coverage

Providing useful and relevant manufacturing data is a top priority for the Regional Data Libraries (RDL) product. To serve more use cases, industries, and ranges of buying power, the 2019-10 release, like prior releases, includes two sets of RDLs; one set covers low-volume material rates, while the other set covers high-volume material rates.

Why publish two sets of Regional Data Libraries?

aPriori customers make up a broad spectrum of material purchasing volumes and buying powers. Therefore, calculating material prices that are appropriate for cost estimation with only one set of market assumptions is insufficient. The two sets of RDLs represent two different levels of purchasing volumes and buying powers. The changes in prices for both sets of 2019-10 RDLs represent the changes in the market since the 2019-08 release.

Which Regional Data Library set should my deployment use?

High-Volume Regional Data Libraries expand material rate coverage for customers in Industrial Machinery, Automotive, and for customers who buy significant volumes of steel material. The High-Volume RDL set is not appropriate for customers who cost small volumes of titanium and heat resistant super alloys such as Inconel or Hastelloy.

The Low-Volume RDL set aligns more with customers in Aerospace & Defense, Semi-conductor, Tooling, and with customers who buy medium to low volumes of steel and aluminum. The Low-Volume RDLs are also more appropriate for customers who cost parts made of titanium and heat resistant super alloys.

This chart can help you understand which material assumptions align with your business. Average unit costs are based on round bar in Stock Machining. Please consult your account teams to determine which set of benchmark material rates align better with your business, buying power, and purchasing volumes. Regional Data Library files are distributed by our Support team.

	Average Unit Cost High Volume (USD / kg)	Average Unit Cost Low Volume (USD / kg)
Aluminum	3.06	7.20
Heat Resistant Super Alloys	13.26	31.13
Stainless Steel	2.82	6.63
Steel	1.04	2.44
Titanium	21.61	50.75

Installation

aPriori Customer Support provides a URL link to the specific update file that is appropriate for your version of aPriori software.

aPriori Regional Data Libraries 2019-10 must be loaded from a computer that has aPriori Professional installed and is on the same Local Area Network (LAN) as the database server. The time required to install the update depends on the connection to the database and the number of regions that need updating. According to aPriori testing, it takes approximately 90 seconds per VPE when loading to a database on a LAN.

Warning: If you attempt to load the updates from a machine that is not on the same LAN as the database server, the update may take many hours to complete.

Although users may remain connected to the system during an update, as a best practice, notify end users prior to updating to the new release. Updates are effective immediately and end users may notice cost differences during the update.

- 1 Download the package provided by aPriori Customer Support to a local folder. This folder should contain the following content:
 - License file containing access to new regions –.apz file
 - A baseline update file - baseLineUpdate-<release-version>-(2019-10).apx
 - Regional Data Libraries – 79 files with extension *.vpe.zip
- 2 Import the new license file. To do so, you must be configured as a System Administrator in the aPriori environment.
- 3 Import the baseline update file. To do so, you must be configured as a VPE Manager in the aPriori environment. Steps for
 - a. Launch the VPE Toolset
 - b. Click **File > Import > Import aPriori Baseline Update...**
 - c. Navigate to and select the baseline update file and then click **Open**.

Note: If you download the file using Internet Explorer, the original file extension of .apx may change to .zip. By default, the file browser only displays files with .apx extensions,

so you need to either select the option to view all files or change the file extension of the update back to .apx.

d. At the confirmation, click **OK**.

While the update is being loaded, you can see the progress in the lower right corner of the **VPE Manager Toolset**.

e. When a pop-up message confirms that the update is complete, click **OK**.

4 Restart aPriori or refresh your database connection

5 Import the Regional Data Libraries. To do so, you must be configured as a VPE Manager in the aPriori environment.

Note: You must complete the previous steps before you attempt the next steps. Although you can import file-by-file using the existing VPE Import capability in the VPE Toolset (**File>Import>VPE...**), doing so is not a best practice because it requires many clicks.

a. Launch the VPE Toolset

b. Click **File > Import > Multiple VPEs...**

c. Follow the steps in the dialog to import the VPEs from the directory you selected:

i. Select a local directory that contains all the regional data libraries.

ii. Select the VPE files you wish to import

iii. Click **OK**

While the update is being loaded, the progress bar displays in the bottom right hand corner of the main UI; progress does not display in the VPE Manager UI. Depending on the number of selected Regional Data Libraries and the speed of your connection, the VPE import can take several hours.

d. When a pop-up message confirms that the update is complete, click **OK**.

Contacting Support

The aPriori support team can help deliver the appropriate Regional Data Library files to aPriori deployments and VPE managers. To contact aPriori Customer Support, use one of these options:

Internet Web site: <http://www.apriori.com/support>

Email: support@apriori.com
