

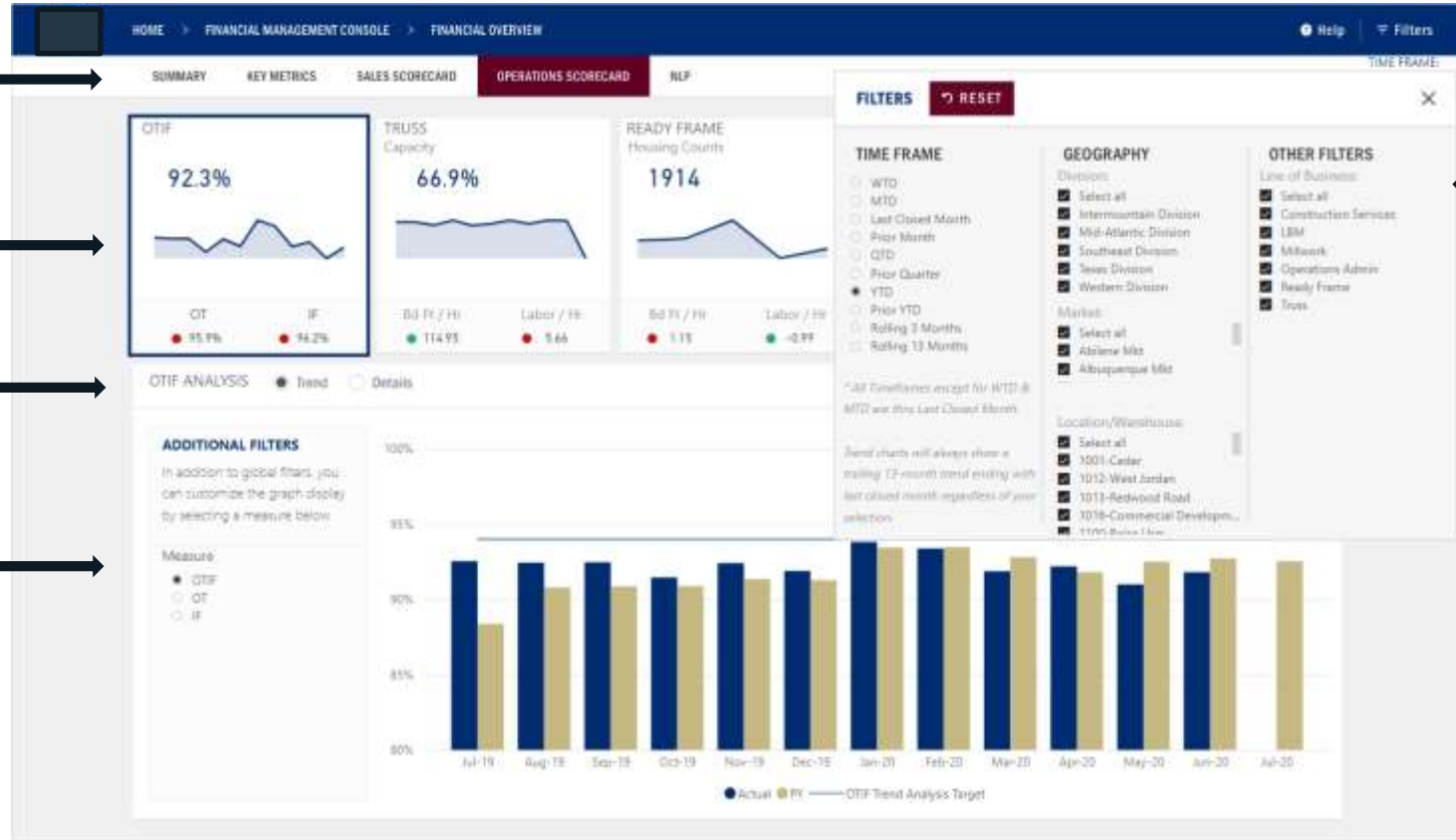
Power BI Dashboard

Dashboard Framework Example

Contents

- Dashboard Navigation Components
- Content Control with Bookmarks
- Modeling Scope
- Modeling Relationships
- Tabular Editor
- Sample Measures (YTD, Selected Values, UP/Down (KPI) Indicator Arrow)
- Application Overview – Additional Screen Shots

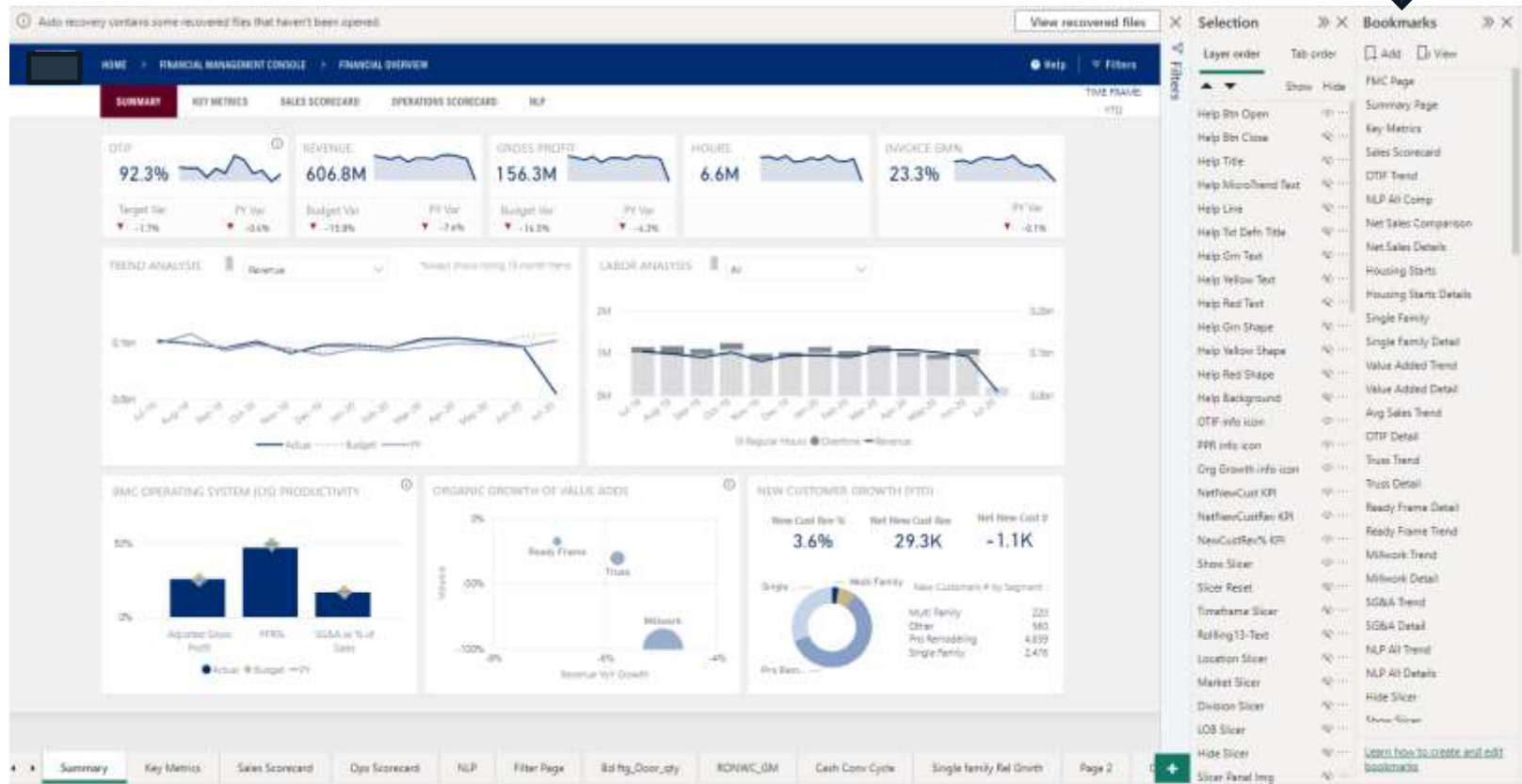
Dashboard Navigation Components



Dashboard – Content Control

Use of Bookmarks and layer visibility

Bookmarks Controlling visible elements



Dashboard – Modeling

45 Imported Tables

The screenshot displays a data modeling software interface. The main workspace is filled with numerous small, overlapping table icons, representing the 45 imported tables. A status bar at the top left indicates: "Auto recovery contains some recovered files that haven't been opened." A "View recovered files" button is located in the top right corner of the workspace. On the right side, there is a "Data" panel with a search bar and a list of table names. The "Properties" panel is also visible on the right. At the bottom left, there are tabs for "All tables", "Layout 1", and a "+" button to add a new layout.

Auto recovery contains some recovered files that haven't been opened.

View recovered files

Data

Search

Properties

- > GL Acct Measures
- > GL Budget Measures
- > BMC OS Productivity Labels
- > CFG_GL_OUTLINE_MODE
- > CFG_ORG_USER_ACCESS
- > CFG_ORG_USER_ACCESS_TEST
- > CFG_ORG_USER_WHSE_ACCESS_TEST
- > FACT_CUSTOMER_HOUSING_COUNT_SUMMARY
- > FACT_CUSTOMER_SALES_NLP_OTL
- > FACT_EMPLOYEE_HEADCOUNT_SUMMARY
- > FACT_GL_ACTUAL_WHSE_SUMMARY
- > FACT_GL_BALANCE_SHEET_ACTUAL_SUMMARY
- > FACT_HOUSING_MARKET_STARTS
- > FACT_LABOR_HOURS_WORKED_SUMMARY
- > FACT_OSHA_RECORDABLE_SUMMARY
- > FACT_READYFRAME_SUMMARY
- > FACT_TRUSS_SUMMARY
- > FACT_WHSE_BOARD_FOOTAGE_SUMMARY
- > FACT_WHSE_INVENTORY_DOORS_SUMMARY
- > FACT_WHSE_SALES_OTP_SUMMARY
- > FACT_WHSE_SALES_SUMMARY
- > Headcount Types by GL_ACCT_NBR
- > LOS Temp
- > MillworkTrendLabels
- > NLP_Comp_Dt_Trend_Label
- > NLP_Count_Sales_Label
- > NLP_Details_Trend_Label
- > Organic Growth Labels
- > OTF-Trend Analysis Labels
- > Parameter
- > Parameter2
- > ReadyframeTrendLabels

All tables Layout 1 +

Dashboard – Modeling Relationships

Manage relationships

Active	From: Table (Column)	To: Table (Column)
<input checked="" type="checkbox"/>	CFG_ORG_USER_WHSE_ACCESS_TEST (WHSE_ID)	VW_ORGANIZATION (WHSE_ID)
<input checked="" type="checkbox"/>	FACT_CUSTOMER_HOUSING_COUNT_SUMMARY (DELIVERY_DT)	VW_CALENDAR_PERIOD (Date)
<input checked="" type="checkbox"/>	FACT_CUSTOMER_HOUSING_COUNT_SUMMARY (WHSE_ID)	VW_ORGANIZATION (WHSE_ID)
<input checked="" type="checkbox"/>	FACT_CUSTOMER_SALES_NLP_DTL (CUSTOMER_SEGMENT_DESC)	VW_CUSTOMER_SEGMENT (CUST_SEGMENT_DESC)
<input checked="" type="checkbox"/>	FACT_CUSTOMER_SALES_NLP_DTL (NLP_RPT_DT)	VW_CALENDAR_PERIOD (Date)
<input checked="" type="checkbox"/>	FACT_CUSTOMER_SALES_NLP_DTL (WHSE_ID)	VW_ORGANIZATION (WHSE_ID)
<input checked="" type="checkbox"/>	FACT_EMPLOYEE_HEADCOUNT_SUMMARY (mdy_1st)	VW_CALENDAR_PERIOD (Date)
<input checked="" type="checkbox"/>	FACT_EMPLOYEE_HEADCOUNT_SUMMARY (WHSE_ID)	VW_ORGANIZATION (WHSE_ID)
<input checked="" type="checkbox"/>	FACT_GL_ACTUAL_WHSE_SUMMARY (CUST_SEGMENT_ID)	VW_CUSTOMER_SEGMENT (CUST_SEGMENT_ID)
<input checked="" type="checkbox"/>	FACT_GL_ACTUAL_WHSE_SUMMARY (NODE_NAME)	CFG_GL_OUTLINE_MODE (NODE_NAME)

New...

Autodetect...

Edit...

Delete

Close

Measures Built via Tabular Editor

The screenshot displays the Tabular Editor interface for Microsoft Power BI. The left pane shows a tree view of measures, with 'Single Family Sales Relative Growth PY' selected. The right pane shows the Expression Editor for this measure, containing the following DAX formula:

```
Single Family Sales Relative Growth PY :=  
CALCULATE([Single Family Sales Relative Growth_2], USERELATIONSHIP(W_CALENDAR_PERIOD[DATE], 'W_TIME_SELECTION'[DATE_PY]))
```

The bottom pane shows the Properties window for the selected measure, displaying various metadata fields:

Property	Value
Description	
Display Folder	
Format String	
Hidden	
Name	Single Family Sales Relative Growth PY
Annotations	
Data Type	Unknown
Default Identifier	[Single Family Sales Relative Growth PY]
Error Message	
Extended Properties	
Measure Type	Measure
State	Ready
Options	
Data Category	
Detail Rows Expression	
Expression	CALCULATE([Single Family Sales Relative Growth_2], USERELATIONSHIP(W_CALENDAR_PERIOD[DATE], 'W_TIME_SELECTION'[DATE_PY]))
Format String Expression	
KPI	
Measure Tag	
Source Measure Tag	
Translations, Perspectives, Security	
Synonyms	
Translated Descriptions	
Aliases	

The bottom status bar indicates: "The name of this object. Warning: Changing this name can break formula logic. If Automatic Formula Fix-up is disabled."

Measures Samples - YTD

```
[Inventories_Net(YTD)] :=  
1 CALCULATE([GL BS Amount],  
2     'FACT_GL_BALANCE_SHEET_ACTUAL_SUMMARY'[NODE_NAME]="NET WORKING CAPITAL",  
3     'FACT_GL_BALANCE_SHEET_ACTUAL_SUMMARY'[Level1]="Inventory",  
4     REMOVEFILTERS(VW_TIME_SELECTION[TIME_SELECTION]),  
5     FILTER (  
6         ALL ( 'VW_CALENDAR_PERIOD'[Date] ),  
7         'VW_CALENDAR_PERIOD'[Date] <= MAX('VW_CALENDAR_PERIOD'[Date])  
8         && YEAR('VW_CALENDAR_PERIOD'[Date]) = YEAR(MAX('VW_CALENDAR_PERIOD'[Date]))  
9     )  
10 )
```


Measures Samples - Selected Value

For dynamic display, based on user selection

```
[SGATrend%LaborSelling] :=
```

```
1
2 IF (
3     SELECTEDVALUE ( 'SG%ATrendLabel_2'[Label] ) = "Total",
4     [SGATrend%LaborSellingTotal],
5     IF (
6         SELECTEDVALUE ( 'SG%ATrendLabel_2'[Label] ) = "Other Operating Expenses",
7         [SGATrend%LaborSellingOtherOPEX],
8         IF (
9             SELECTEDVALUE ( 'SG%ATrendLabel_2'[Label] ) = "Total Labor Costs",
10            [SGATrend%LaborSellingTotalLaborCosts]
11        )
12    )
13 )
```

Measures Samples - Up/Down Arrow

Despite variable names (red/green) below, these formulas just control arrow direction.

REC. INJURY RATE			①
0.6	Goal Var	PY Var	
▲ 59.6%	▲ 59.6%		

```
[Injury Rate PY Var% Arrow] :=  
1 var Red = UNICHAR(9660) var Green = UNICHAR(9650) return SWITCH( TRUE(),[Injury Rate PY Var%]>=0,Green,[Injury Rate PY Var%]<0,Red,0)
```

```
[Injury Rate PY Var% Arrow Condition] :=  
1 SWITCH(TRUE(),[Injury Rate PY Var%]>0,2,[Injury Rate PY Var%]<0,1,ISBLANK([Injury Rate PY Var%]),3,0)
```

Measure Samples - Arrow Color Control

[Injury Rate PY Var% Arrow Condition] :=
1 SWITCH(TRUE(),[Injury Rate PY Var%]>0,2,[Injury Rate PY Var%]<0,1,ISBLANK([Injury Rate PY Var%]),3,0)

The image shows the 'Color - Callout value' dialog box in Power BI, configured for the measure '[Injury Rate PY Var% Arrow Condition]'. The 'Format style' is set to 'Rules'. The 'What field should we base this on?' dropdown is set to 'Injury Rate PY Var% Arrow Condition'. The 'Rules' section contains three rules:

If value	then
= 1	Green
= 2	Red
= 3	White

Red arrows point to the measure name in the top formula bar, the field dropdown, and the 'Color' selection in the 'Callout value' panel. The 'Callout value' panel on the right shows the 'Visual' tab selected, with 'Font' set to 'DIN', 'Color' set to 'Green', and 'Display units' set to 'Auto'. The 'Category label' is set to 'Injury Rate PY Var% Arrow'.

Application Overview

Additional Screen Shots

SUMMARY

KEY METRICS

SALES SCORECARD

OPERATIONS SCORECARD

NLP

OTIF

92.3%



Target Var

▼ -1.7%

PY Var

▼ -0.4%

REVENUE

606.8M



Budget Var

▼ -15.8%

PY Var

▼ -7.6%

GROSS PROFIT

156.3M



Budget Var

▼ -14.5%

PY Var

▼ -4.3%

HOURS

6.6M



INVOICE GM%

23.3%



PY Var

▼ -0.1%

TREND ANALYSIS FOR:

Revenue

*Always shows rolling 13-month trend



LABOR ANALYSIS BY:

All



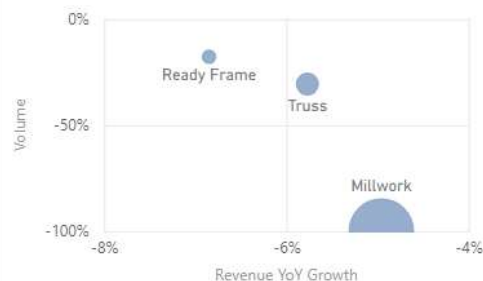
BMC OPERATING SYSTEM (OS) PRODUCTIVITY

50%



Actual Budget PY

ORGANIC GROWTH OF VALUE ADDS



NEW CUSTOMER GROWTH (YTD)

New Cust Rev %

3.6%

Net New Cust Rev

29.3K

Net New Cust #

-1.1K



SUMMARY

KEY METRICS

SALES SCORECARD

OPERATIONS SCORECARD

NLP

TIME FRAME:

YTD

REC. INJURY RATE	PPR%	SALES PER WORKDAY	DIST. & WHSE EXP	RONWC	CASH CONV. CYCLE
0.6	47.0%	4.0M	5.8%	13.1%	N/A
Goal Var ▲ 59.6%	PY Var ▲ 59.6%	Goal Var ▼ -2.1%	PY Var ▼ -2.3%	Goal Var ▼ -15.8%	PY Var ▼ -8.2%
			Goal Var ▲ 0.2%	PY Var ▼ -0.3%	Goal Var ▲ 3.2%
				PY Var ▼ -18.5%	Goal Var ▲ (Blank)
					PY Var ▲ (Blank)

ADJUSTED GROSS PROFIT

156.3M



Goal Var

▼ -14.5%

PY Var

▼ -4.3%

TOTAL HEADCOUNT

COMING SOON

INCOME STATEMENT

	AMOUNT	% OF SALES		BUDGET	BUDGET VAR	PRIOR YR	PY VAR
NET SALES	606,836,627	100.0%	◆	721,088,365	-114,251,738	656,644,847	-49,808,220
COST OF GOODS SOLD	-450,530,989	-74.2%	●	-538,185,453	87,654,465	-493,399,101	42,868,112
ADJUSTED GROSS PROFIT	156,305,638	25.8%	◆	182,902,911	-26,597,273	163,245,746	-6,940,108
OTHER OPEX	28,632,280	4.7%	◆	33,001,942	-4,369,662	31,346,274	-2,713,994
TOTAL LABOR COSTS	73,424,193	12.1%	◆	89,715,532	-16,291,339	80,452,895	-7,028,701
SG&A	102,056,473	16.8%	◆	122,717,474	-20,661,001	111,799,169	-9,742,696
EBIT	50,273,498	8.3%	▲	54,551,211	-4,277,713	46,870,767	3,402,731
EBITDA	57,433,047	9.5%	▲	64,125,526	-6,692,478	54,926,321	2,506,726

SUMMARY

KEY METRICS

SALES SCORECARD

OPERATIONS SCORECARD

NLP

TIME FRAME:

YTD

INVOICE SALES

549.0M

PY Var

▼ -9.3%

HOUSING STARTS

287K

PY Var

▼ -1.2%

SINGLE FAMILY RELATIVE

GROWTH
-16%

VALUE-ADDED GROWTH

-15.5M

PY Var

▼ -5.2%

AVG SALES PRICE

153

PY Var

▼ -16.9%

INVOICE SALES ANALYSIS

☒ Trend☐ Comparison☐ Details

*Trend chart always shows rolling 13-month trend

ADDITIONAL FILTERS

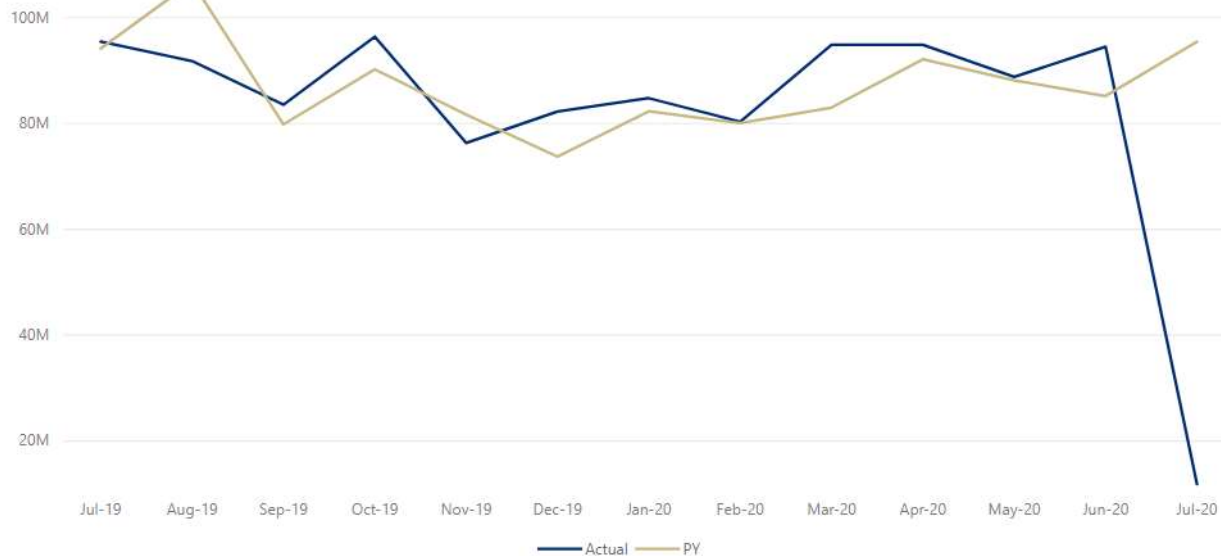
In addition to global filters, you can customize the graph display by selecting a measure below.

Customer Type

- ☒ Select all
- ☐ Multi Family
- ☐ Other
- ☐ Pro Remodeling
- ☐ Single Family

Product Group

- ☒ Select all
- ☐ Components
- ☐ EWP
- ☐ Lumber & Sheet Goods
- ☐ Millwork & Doors
- ☐ Other Building Products & Serv...
- ☐ Ready Frame
- ☐ Windows



SUMMARY

KEY METRICS

SALES SCORECARD

OPERATIONS SCORECARD

NLP

TIME FRAME:

YTD

INVOICE SALES

549.0M

PY Var

▼ -9.3%

HOUSING STARTS

287K

PY Var

▼ -1.2%

SINGLE FAMILY RELATIVE

GROWTH

-16%

VALUE-ADDED GROWTH

-15.5M

PY Var

▼ -5.2%

AVG SALES PRICE

153

PY Var

▼ -16.9%

HOUSING STARTS ANALYSIS

☒ Trend☐ Details

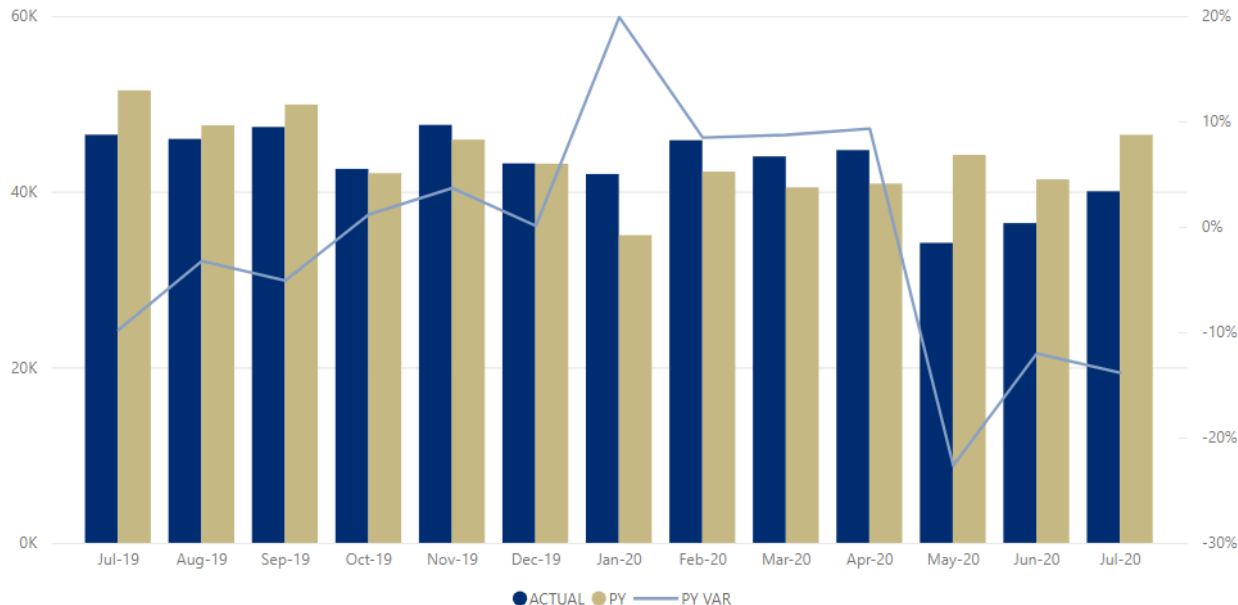
*Trend chart always shows rolling 13-month trend

ADDITIONAL FILTERS

In addition to global filters, you can customize the graph display by selecting a measure below.

Customer Type

- ☒ Select all
- ☐ Multi Family
- ☐ Single Family



TIME FRAME:

YTD

SUMMARY

KEY METRICS

SALES SCORECARD

OPERATIONS SCORECARD

NLP

INVOICE SALES

549.0M

PY Var
▼ -9.3%

HOUSING STARTS

287K

PY Var
▼ -1.2%SINGLE FAMILY RELATIVE
GROWTH

-16%



VALUE-ADDED GROWTH

-15.5M

PY Var
▼ -5.2%

AVG SALES PRICE

153

PY Var
▼ -16.9%

HOUSING STARTS ANALYSIS

☐ Trend☒ Details

HOUSING STARTS → DIVISION → MARKET

HOUSING TYPE

ACTUAL

PRIOR YR

PY VAR #

PY VAR %

☐ Multi Family☒ Intermountain Division

12,680

13,571

-891

-6.6%

☐ Mid-Atlantic Division

15,053

18,779

-3,726

-19.8%

☐ Southeast Division

11,574

11,735

-161

-1.4%

☐ Texas Division

39,667

38,403

1,264

3.3%

☐ Western Division

26,339

32,404

-6,065

-18.7%

☒ Single Family

Total

287,213

290,768

-3,555

-1.2%

SUMMARY

KEY METRICS

SALES SCORECARD

OPERATIONS SCORECARD

NLP

TIME FRAME:

YTD

OTIF

92.3%



OT

● 95.9%

IF

● 96.2%

TRUSS
Capacity

66.9%



Bd Ft / Hr

● 114.95

Labor / Hr

● 5.66

READY FRAME
Housing Counts

1914



Bd Ft / Hr

● 1.15

Labor / Hr

● -0.99

MILLWORK
Doors Produced

229.32K



Doors / Hr

● 0.26

Labor / Hr

● 10.50

SG&A AS % OF SALES

16.82%



Budget Var

● -0.2%

PY Var

● -0.2%

TRUSS ANALYSIS



Trend



Details

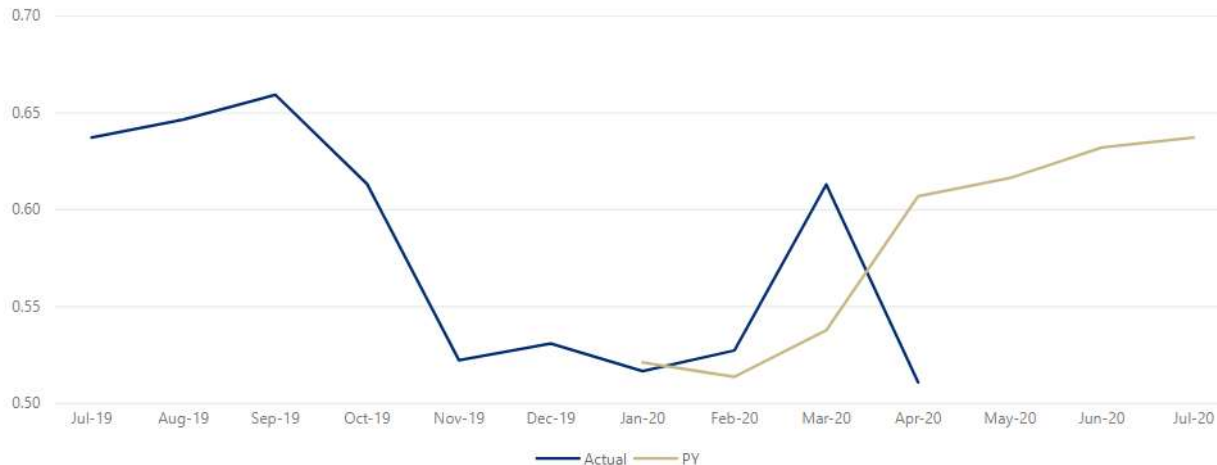
*Trend chart always shows rolling 13-month trend

ADDITIONAL FILTERS

In addition to global filters, you can customize the graph display by selecting a measure below.

Measure

- ☒ Capacity
- ☐ Board Footage Produced
- ☐ Board Footage/Hr Worked
- ☐ Labor/Hr Worked



SUMMARY

KEY METRICS

SALES SCORECARD

OPERATIONS SCORECARD

NLP

TIME FRAME:

YTD

NET NEW CUSTOMER SALES

29K

NET NEW CUSTOMERS

-1,138

SHIP TO COUNT

171K

SALES PER SHIP TO

9.6

New Customers

8,095

Lost Customers

9,233

PY

9.6

PY Var #

▼ -0.01

PY Var

▼ -0.1%

ALL

27,218

PY Var #

▼ -1138

NEW

8,095

LOST

9,233

GROWING

7,918

DECLINING

11,205

CUSTOMER ANALYSIS

☐ Trend☒ Comparison☐ Details[NLP Customer Level Detail](#)[Report Definitions & Constraints](#)

ADDITIONAL FILTERS

In addition to global filters, you can customize the graph display by selecting a measure below.

Customer Type

☒ Count☐ Sales

Product Group

☐ Count☐ Sales

Thank you