

ISM-Houston Business Report

January 2020



ISM—Houston, Inc.

Analysis and report by **Ross Harvison, CPSM**
 Chair of the ISM-Houston Business Survey Committee

(Houston, Texas) – According to Houston area supply chain executives, goods producing industry activity in Houston expanded this month for the first time since September. Services producing industry activity also returned to expansion after two months reporting contraction. Overall economic activity is now expanding at a moderate pace.

The January Houston Purchasing Managers Index rose significantly to **52.5** from last month's level of 47.4. Two of the three underlying indicators that have the strongest direct correlation with economic activity, employment and lead times, are now pointing to expansion. The third underlying indicator with a strong positive correlation, sales/new orders, remains below neutral. The employment index rose 11.1 points to 58.3. The lead times index rose 0.7 points to 51.2. The sales/new orders index rose 3.6 points to 47.7. The underlying indicator that has the largest inverse correlation, finished goods inventory, rose 7.9 points to 55.3.

The three-month forecast for the Houston PMI rose 1.5 points to 51.2. Strengthening of the sales/new orders, prices paid, and lead times indices drove most of this increase. These indices have a strong direct correlation with economic activity at the three-month forecast horizon.

On an industry specific basis, construction, manufacturing, mid-stream operations, utilities, professional services, and health care reported expansion. Oil & gas and wholesale trade reported further contraction. From a three-month forecast standpoint, modest improvement is predicted.

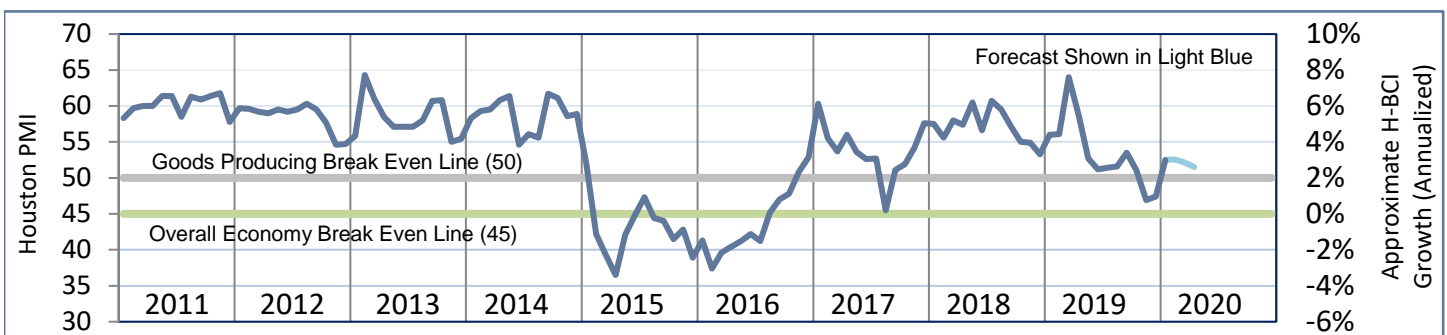
Indices at a Glance

Index	Jan	Dec	Change	Track	Rate	Trend*
Houston PMI - Current	52.5	47.4	5.1	Expanding	Fr. Contracting	1
Houston PMI - 3 Month Forecast	51.2	49.7	1.5	Expanding	Fr. Contracting	1
Sales/New Orders	47.7	44.1	3.6	Falling	Slower	3
Production	52.3	52.4	-0.1	Rising	Slower	2
Employment	58.3	47.2	11.1	Rising	Fr. Falling	1
Purchases	46.5	44.0	2.5	Falling	Slower	3
Prices Paid	51.5	43.7	7.8	Rising	Fr. Falling	1
Lead Times	51.2	50.5	0.7	Rising	Faster	2
Purchased Inventory	50.0	52.4	-2.4	Neutral	Neutral	1
Finished Goods Inventory	55.3	47.4	7.9	Rising	Fr. Falling	1
Overall Houston Economy				Expanding	Faster	42

* Number of months on current track

Houston PMI Trend

Overall economic activity in Houston has grown for 42 months. HPMI readings over 50 generally indicate goods producing industry expansion; readings below 50 show contraction. An HPMI above 45 generally correlates with expansion of the Houston-The Woodlands-Sugar Land Business Cycle Index (H-BCI).



Commodities Reported to have Notable Price Changes or to be in Short Supply

Up in Price: Precious metals for catalysts, especially Rhodium; bulk chemicals; ready mix concrete; transformers electrical equipment, copper wire and cable; heat exchangers, alloy pipe; ocean freight

Down in Price: Crude oil and motor fuels; natural gas, ethane, propane, natural gas liquids; carbon steel materials; ocean freight

In Short Supply: Craft labor, welders; bulk chemicals

Respondent Comments and Sector Summaries

Oil and Gas Exploration, and Key Support Services:

- U.S. and Texas rig counts are still falling, but at much slower rate than they did last year
- *This sector reported contraction again this month with the sales index joining the employment, purchases, and prices paid indices pointing to significant slowing*

Engineering and Construction:

- Big projects continue to be delayed; more inquiry activity on mid size projects
- Lagging replacement of retiring experienced professionals in the oil and gas industry has created a knowledge gap
- *This sector reported expansion this month; the employment and prices paid indices continue to point to expansion; new orders were flat*

Manufacturing - Durable Goods:

- Manufacturing for the oil and gas Industry remains weak domestically, but International orders helped keep us busy
- New orders are down; backlog is declining.
- *This sector moved back to expansion this month with the sales, production, employment, purchases, and prices paid indices point to growth; the lead times index fell back below neutral*

Manufacturing - Non-Durable Goods:

- Ethylene and propylene prices have stabilized after falling during the 4th quarter; polymer prices have also stabilized
- *This sector moved back to expansion during the month with significant improvement in the employment index; while the production index remained flat, the sales index continued to indicate contraction*

Transportation and Utilities (including mid-stream operations):

- *This sector remained strong this month, primarily driven by strength in the sales and employment indices*

Professional Services:

- Starting to see some movement to fill in positions
- After a strong start in early January most O&G companies paused later in the month as oil prices declined
- The coronavirus and a multitude of geopolitical issues are causing concern
- With new budgets and plans, the view for O&G hiring and capital expenditures was promising until the price of oil fell
- *This sector returned to indicating expansion during the month with both the sales and employment indices showing significant strength*

Health Care:

- *This sector reported strength again this month; the employment index remained well above neutral*

Trend of Underlying Indicators

The Houston PMI is based on diffusion indices for eight underlying indicators. The net value of each indicator is simply the percentage of respondents who cite a positive shift from the previous month minus the percentage who cite a negative shift. The diffusion index is calculated based on the percent of respondents reporting higher results plus one-half of those responding the same with a seasonal adjustment based on an X13 ARIMA forecast. Values above 50 for Sales/New Orders, Production, Employment, Prices Paid, and Lead Times generally point towards expansion and values below 50 signal contraction. Note that the Prices Paid Index may not follow this trend late in an economic expansion. The Inventory measures have an inverse correlation at most forecast horizons, meaning that values below 50 point to expansion and values above point to contraction. The Purchases index is inversely correlated with economic activity at the three-month forecast horizon.

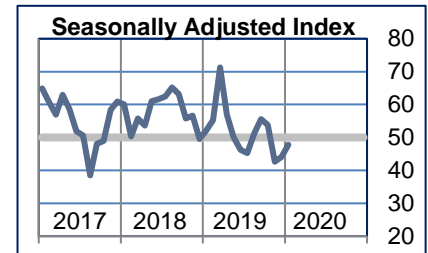
ISM-Houston Business Report

January 2020

Sales/New Orders Index

The sales/new orders index remained below neutral. Durable goods manufacturing, health care, and mid-stream operations reported strength. Oil & gas, non-durable goods, and wholesale trade reported weakness.

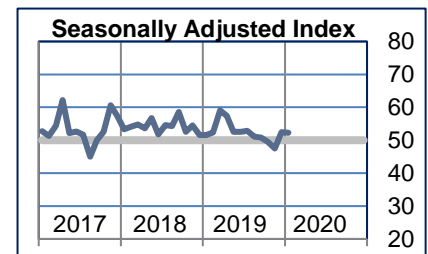
	Higher	Same	Lower	Net	Index
Aug/19	7%	90%	3%	4%	51.3
Sep/19	14%	84%	2%	12%	55.6
Oct/19	10%	87%	3%	7%	53.9
Nov/19	1%	80%	19%	-18%	42.6
Dec/19	4%	77%	19%	-15%	44.1
Jan/20	14%	71%	15%	-1%	47.7



Production Index

The production index remained relatively flat. Durable goods manufacturing joined utilities in reporting strength. All other industries responded near neutral.

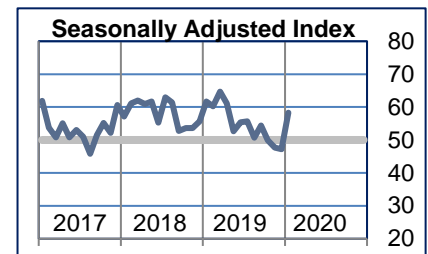
	Higher	Same	Lower	Net	Index
Aug/19	4%	95%	1%	3%	51.1
Sep/19	6%	90%	4%	2%	50.8
Oct/19	2%	97%	1%	1%	49.6
Nov/19	2%	93%	5%	-3%	47.5
Dec/19	6%	89%	5%	1%	52.4
Jan/20	9%	87%	4%	5%	52.3



Employment Index

The employment index rose significantly. Manufacturing, construction, mid-stream operations, health care and professional services reported strength. Only oil & gas responded that this index was contracting.

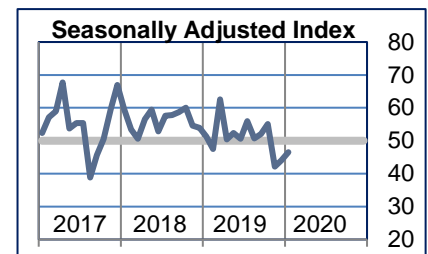
	Higher	Same	Lower	Net	Index
Aug/19	7%	86%	7%	0%	50.7
Sep/19	13%	84%	3%	10%	54.4
Oct/19	8%	85%	7%	1%	50.0
Nov/19	9%	79%	12%	-3%	47.7
Dec/19	8%	78%	14%	-6%	47.2
Jan/20	22%	74%	4%	18%	58.3



Purchases Index

The purchases index rose modestly, but remained below neutral. Oil & gas, construction, non-durable goods reported this index as contracting. Durable goods manufacturing and utilities reported it as expanding.

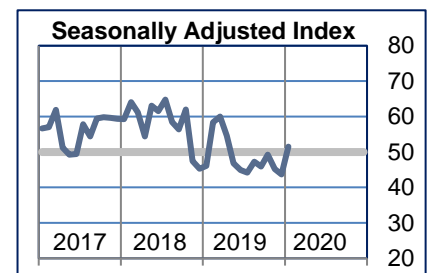
	Higher	Same	Lower	Net	Index
Aug/19	8%	89%	3%	5%	50.7
Sep/19	13%	84%	3%	10%	52.1
Oct/19	11%	88%	1%	10%	55.1
Nov/19	7%	72%	21%	-14%	42.1
Dec/19	8%	68%	24%	-16%	44.0
Jan/20	4%	88%	8%	-4%	46.5



Prices Paid Index

The prices paid index rebounded to above neutral with construction and manufacturing reporting significant increases in this index. Only oil & gas reported prices as falling.

	Higher	Same	Lower	Net	Index
Aug/19	3%	89%	8%	-5%	47.3
Sep/19	1%	92%	7%	-6%	45.9
Oct/19	6%	88%	6%	0%	49.2
Nov/19	2%	85%	13%	-11%	45.2
Dec/19	2%	80%	18%	-16%	43.7
Jan/20	4%	95%	1%	3%	51.5



ISM-Houston Business Report

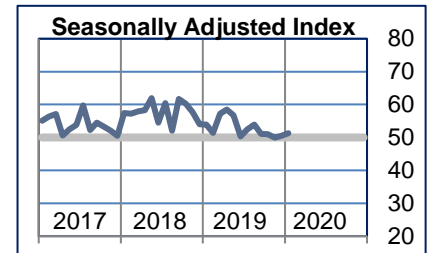
January 2020



Lead Times Index

The lead times index rose marginally. Oil & gas and non-durable goods manufacturing reported this index as rising again this month. Transportation and durable goods manufacturing reported lead times as falling.

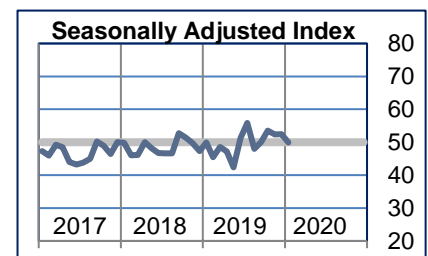
	Higher	Same	Lower	Net	Index
Aug/19	15%	81%	4%	11%	53.9
Sep/19	5%	94%	1%	4%	51.1
Oct/19	6%	89%	5%	1%	51.0
Nov/19	5%	89%	6%	-1%	49.9
Dec/19	5%	90%	5%	0%	50.5
Jan/20	5%	92%	3%	2%	51.2



Purchased Inventory Index

The purchased inventory index fell to neutral with only non-durable goods manufacturing reporting an increase in this index. All other sectors reported near neutral overall.

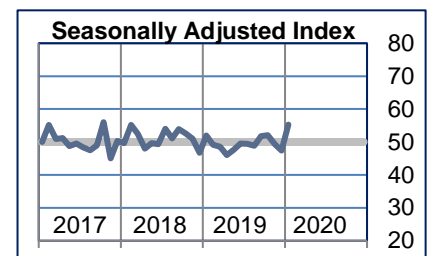
	Higher	Same	Lower	Net	Index
Aug/19	5%	87%	8%	-3%	48.0
Sep/19	1%	95%	4%	-3%	50.0
Oct/19	2%	96%	2%	0%	53.6
Nov/19	4%	94%	2%	2%	52.4
Dec/19	2%	95%	3%	-1%	52.4
Jan/20	8%	88%	4%	4%	50.0



Finished Goods Inventory Index

The finished goods inventory index rose significantly to end well above neutral. Oil & gas, durable goods manufacturing, and wholesale trade reported this index as expanding, while all other sectors reported near neutral.

	Higher	Same	Lower	Net	Index
Aug/19	4%	91%	5%	-1%	48.8
Sep/19	2%	97%	1%	1%	51.8
Oct/19	1%	98%	1%	0%	52.1
Nov/19	2%	97%	1%	1%	49.3
Dec/19	2%	94%	4%	-2%	47.4
Jan/20	16%	80%	4%	12%	55.3



Houston PMI Calculation Methods

The Houston Purchasing Managers Index provides a measure of current economic activity in the greater Houston area and a forecast of likely shifts in activity over a three-month forecast horizon. The current and forecast HPMI indices are based on diffusion indices for the eight underlying indicators noted in this report. The respondents to the survey report the direction of each these activities as up, the same, or down in comparison to the previous month. An index for each area is calculated by subtracting the percentage of respondents that sight a negative shift from the percentage that sight a positive shift. The HPMI is calculated by applying optimal regression factors to each of these underlying indicators with the result being converted to a 0 to 100 scale. Readings over 50 generally indicate manufacturing expansion; readings below 50 show contraction. An HPMI above 45 generally correlates with expansion of the Houston-The Woodlands-Sugar Land Business Cycle Index (H-BCI).

Use of ISM-Houston Business Report Content

All information contained in this report is protected by copyright laws and ISM-Houston retains all rights to this Content. ISM-Houston hereby grants you a limited, revocable license to access, print, and display this Content solely for your personal, non-commercial use. Requests for permission to reproduce or redistribute ISM-Houston Business Report Content can be made by contacting the ISM-Houston Business Survey Committee at hpmi@ism-houston.org.

ISM-Houston shall not have any liability, duty, or obligation for or relating to the ISM-Houston Business Report Content or other information contained herein, any errors, inaccuracies, omissions or delays in providing any ISM-Houston Business Report Content, or for any actions taken in reliance thereon. In no event shall ISM-Houston be liable for any special, incidental, or consequential damages, arising out of the use of the ISM-Houston Business Report.