

ISM-Houston Business Report

January 2019



ISM—Houston, Inc.

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

(Houston, Texas) – According to Houston supply chain executives, manufacturing activity in Houston expanded in January for the 17th consecutive month and overall economic activity expanded for the 30th month. The near-term forecast points to continued economic growth. The manufacturing forecast returned to indicating growth at a slow pace during the coming quarter.

The December Houston Purchasing Managers Index registered **56.0**, up from 53.3 last month. The sales/new orders index rejoined the employment and lead times indices indicating strength. These three underlying indicators have the strongest positive correlation with current economic activity. The prices paid index fell again during the month indicating falling prices for the third month in a row.

The three-month forecast for the Houston PMI registered **50.8**, up a modest 1.0 points from its December reading of 49.8. Rising sales/new orders, production, and lead times, which are all directly correlated with economic activity at all forecast horizons, were the primary drivers for the improvement in the forecast index.

On an industry specific basis Health Care, Professional Services, Durable Goods Manufacturing, and Wholesale Trade reported moderate to strong levels of expansion. Non-durable Goods manufacturing and Oil & Gas reported contraction. From a three-month forecast standpoint, Health Care, Construction, and Durable Goods Manufacturing should show continued strength. Non-durable Goods Manufacturing and Wholesale Trade are expected to weaken.

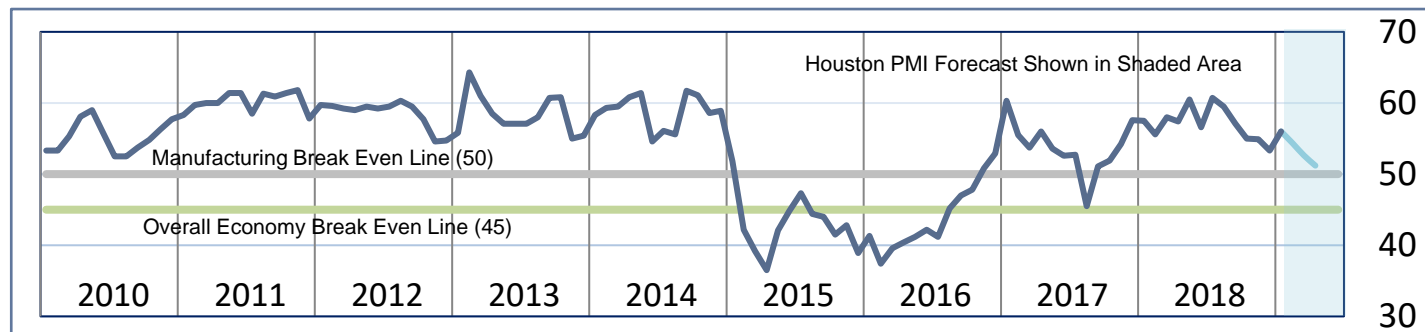
Indices at a Glance

Index	Jan	Dec	Change	Track	Rate	Trend*
Houston PMI - Current	56.0	53.3	2.7	Expanding	Faster	17
Houston PMI - 3 Month Forecast	50.8	49.8	1.0	Expanding	Fr. Contracting	1
Sales/New Orders	52.2	49.5	2.7	Rising	Fr. Falling	1
Production	51.5	51.6	-0.1	Rising	Slower	17
Employment	61.7	55.7	6.0	Rising	Faster	17
Purchases	51.3	54.0	-2.7	Rising	Slower	16
Prices Paid	46.1	45.3	0.8	Falling	Slower	3
Lead Times	53.9	54.0	-0.1	Rising	Slower	26
Purchased Inventory	49.9	47.3	2.6	Falling	Slower	3
Finished Goods Inventory	51.9	46.8	5.1	Rising	Fr. Falling	1
Overall Houston Economy				Expanding	Slower	30

* Number of months on current track

Houston PMI Trend

Manufacturing expansion, including supporting services, continued for the 17th consecutive month in January with the Houston PMI registering 56.0, an increase of 2.7 points from December. This growth was led by strong performance in the sales/new orders, employment, and lead times indices. Readings over 50 generally indicate manufacturing expansion; readings below 50 show contraction. A PMI above 45 generally correlates with expansion of the Houston-The Woodlands-Sugar Land Business Cycle Index.



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

Up in Price: Crude, motor fuels, and aromatics; methanol, styrene; butane; transportation and logistics costs; transformers and some electrical equipment; vaccines; professional services

Down in Price: Carbon and alloy steel products; frac horsepower; shop space; ethylene, propylene, and butadiene

In Short Supply: Construction labor

Sector Summaries

Oil and Gas Exploration, and Key Support Services:

- Our purchases are always down in January
- *This sector reported softening this month with falling sales, employment, and purchases; lead times remain high*

Engineering and Construction:

- *Respondents in this sector reported growth near neutral; the prices paid index pointed to expansion; purchases fell*

Manufacturing - Durable Goods:

- Manufacturing for the oil and gas industry is starting strong; it is hard to build inventory when we have a sale for almost everything we produce.
- *This sector rebounded to strong performance this month; production and sales were strong; purchases, lead times, and inventories continue to climb*

Manufacturing - Non-Durable Goods:

- Ethylene and propylene inventories on the Gulf Coast remain high
- Softening in the butadiene market appears to continue
- *This sector reported significant weakening this month; the sales, employment, purchases, prices paid, and lead times indices were reported as falling; both inventory indices were reported as rising at a fast pace; production was flat*

Mid-Stream Operations:

- *Respondents in this area reported all indices near neutral again this month*

Wholesale Trade:

- *Respondents in this area reported improvement again this month; employment and purchases were up; prices paid were down*

Professional Services:

- The staffing business has seen an uptick with companies now willing to hire again after freezing activities during the 4th quarter; CEO's a little more optimistic and not as concerned as they were
- O&G companies continue to be more disciplined in terms hiring of both direct employees and non-employee labor to support operations and capital projects
- *Overall, respondents in this area reported a rebound from a very poor December; the sales/new orders and employment indices rose significantly*

Health Care:

- Vaccine and medication pricing on the rise as is normal for the first of the year
- *This sector continues to report strong growth; the employment, purchases, prices paid, and lead times indices all showed significant strength; other indicators came in near 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. Seasonally adjusted values above 50 for the Sales/New Orders, Production, Employment, Prices Paid, and Lead Times indicators generally point towards expansion at all forecast horizons 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 two, three, and four month forecast horizons.

ISM-Houston Business Report

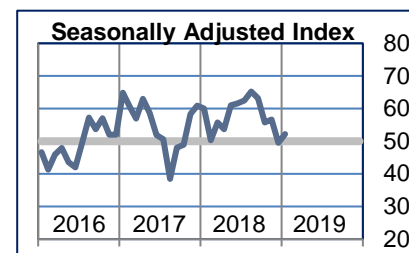
January 2019



Sales/New Orders Index

The sales/new orders index moved back to a rising track this month after one month indicating contraction. Durable goods manufacturing reported rising sales, while non-durable goods and O&G reported falling sales.

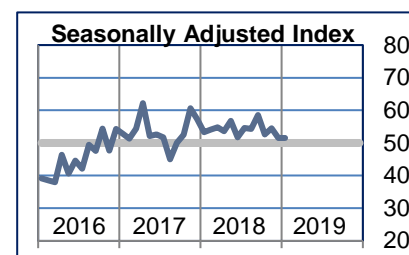
	Higher	Same	Lower	Net	Index
Aug/18	28%	71%	1%	27%	65.2
Sep/18	32%	61%	7%	25%	63.1
Oct/18	19%	69%	12%	7%	55.8
Nov/18	11%	83%	6%	5%	56.6
Dec/18	9%	77%	14%	-5%	49.5
Jan/19	11%	81%	8%	3%	52.2



Production Index

The production index was relatively flat from last month, remaining just above neutral. Only durable goods manufacturing reported this index as rising. All other sectors reported near neutral.

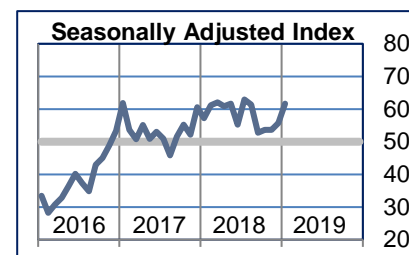
	Higher	Same	Lower	Net	Index
Aug/18	11%	87%	2%	9%	54.3
Sep/18	18%	81%	1%	17%	58.6
Oct/18	12%	83%	5%	7%	52.6
Nov/18	6%	93%	1%	5%	54.5
Dec/18	5%	92%	3%	2%	51.6
Jan/19	3%	96%	1%	2%	51.5



Employment Index

The employment index improved further this month with health care, professional services, and wholesale trade reporting increased employment. Non-durable goods manufacturing and oil & gas reported decreases.

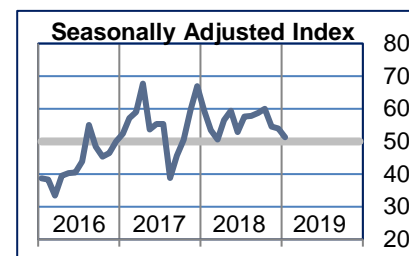
	Higher	Same	Lower	Net	Index
Aug/18	25%	68%	7%	18%	61.4
Sep/18	14%	78%	8%	6%	52.7
Oct/18	18%	73%	9%	9%	53.6
Nov/18	16%	75%	9%	7%	53.6
Dec/18	20%	74%	6%	14%	55.7
Jan/19	35%	50%	15%	20%	61.7



Purchases Index

The purchases index fell to near neutral. Health care, durable goods manufacturing, and wholesale trade reported greater purchases. Construction, O&G and non-durable goods reported purchases as lower.

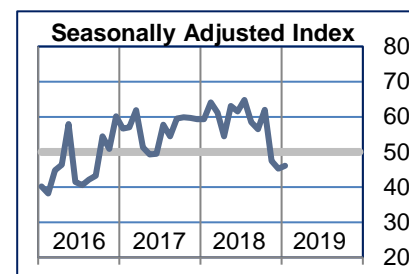
	Higher	Same	Lower	Net	Index
Aug/18	22%	74%	4%	18%	57.8
Sep/18	26%	66%	8%	18%	58.7
Oct/18	22%	70%	8%	14%	60.0
Nov/18	10%	87%	3%	7%	54.6
Dec/18	12%	82%	6%	6%	54.0
Jan/19	16%	72%	12%	4%	51.3



Prices Paid Index

The prices paid index continued to indicate price contraction. Healthcare and construction reported this index as rising. Wholesale trade and non-durable goods manufacturing reported price contraction.

	Higher	Same	Lower	Net	Index
Aug/18	16%	83%	1%	15%	58.5
Sep/18	20%	72%	8%	12%	56.4
Oct/18	30%	69%	1%	29%	62.0
Nov/18	8%	81%	11%	-3%	47.4
Dec/18	10%	74%	16%	-6%	45.3
Jan/19	12%	68%	20%	-8%	46.1



ISM-Houston Business Report

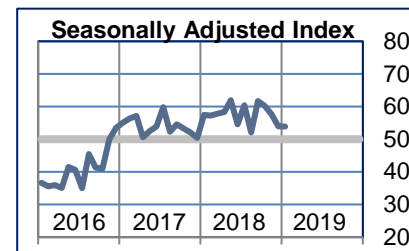
January 2019



Lead Times Index

The lead times index continues to show lead times as increasing overall. Health care and durable goods manufacturing joined O&G as indicating increases in this index. Non-durable goods reported lead times as falling.

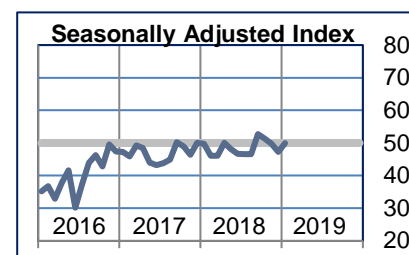
	Higher	Same	Lower	Net	Index
Aug/18	8%	91%	1%	7%	52.1
Sep/18	24%	75%	1%	23%	61.7
Oct/18	18%	81%	1%	17%	60.2
Nov/18	17%	82%	1%	16%	57.7
Dec/18	11%	85%	4%	7%	54.0
Jan/19	10%	85%	5%	5%	53.9



Purchased Inventory Index

The purchased goods inventory index rose to near neutral. Manufacturing reported increased inventories, while construction reported lower inventories. All other sectors reported near neutral.

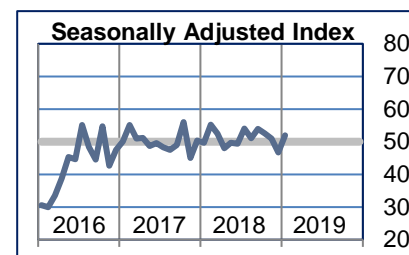
	Higher	Same	Lower	Net	Index
Aug/18	1%	92%	7%	-6%	46.6
Sep/18	8%	89%	3%	5%	52.7
Oct/18	4%	89%	7%	-3%	51.4
Nov/18	5%	90%	5%	0%	49.7
Dec/18	1%	89%	10%	-9%	47.3
Jan/19	10%	87%	3%	7%	49.9



Finished Goods Inventory Index

The finished goods inventory index returned to showing increasing inventories. Both durable goods and non-durable goods manufacturing reported sizable increases. Other sectors reported near neutral.

	Higher	Same	Lower	Net	Index
Aug/18	11%	81%	8%	3%	51.1
Sep/18	9%	89%	2%	7%	53.9
Oct/18	5%	94%	1%	4%	52.6
Nov/18	5%	93%	2%	3%	51.0
Dec/18	1%	94%	5%	-4%	46.8
Jan/19	10%	89%	1%	9%	51.9



Comments on Houston PMI Calculation Methods

The Houston PMI is calculated by applying optimal regression factors to each of the eight underlying indicators noted above. These regression factors are determined using standard regression techniques comparing these underlying indicators to the Houston-The Woodlands-Sugar Land Business Cycle Index (Houston BCI), which is reported on a monthly basis by the Federal Reserve Bank of Dallas. ISM-Houston periodically reviews the capability of its correlations and adjusts the regression factors when appropriate. The most recent revision occurred as a result of a review undertaken during the third quarter of 2018, which determined that changes in the Houston economy over the last decade have shifted the intercept of the correlation, causing a neutral Houston PMI to no longer align with a neutral Houston BCI. A Houston PMI of 45 points now equates to a neutral Houston BCI. A similar offset between the National PMI and the National economy has existed for some time.

The new regression factors have been utilized for this report. Additionally, the Houston PMI reported from the beginning of 2014 to present has been restated using the revised regression factors.

The ISM-Houston Business Report began in January 1995
 Subscriptions are available through ISM-Houston, Inc. and can be obtained by request at hpmi@ism-houston.org
 The Institute for Supply Management-Houston is an affiliate of the Institute for Supply Management
 Copyright 2019 by ISM-Houston, Inc. All Rights Reserved