

ISM-Houston Business Report

October 2019



ISM—Houston, Inc.

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

(Houston, Texas) – According to Houston supply chain executives, goods producing industry activity in Houston expanded in October. Construction, which has reported strong growth all year, boosted the overall result for this industry group. On a stand-alone basis oil & gas and manufacturing, the remaining industries in this group, have reported moderate contraction for several months. This accelerated somewhat in October. Services producing industry and overall economic activity expanded.

The October Houston Purchasing Managers Index registered **51.1**, down 2.4 points from a month earlier. The three underlying indicators that have the strongest direct correlation with economic activity (sales/new orders, employment, and lead times), while weakening, continue to point to near term expansion. The sales/new orders index fell 1.7 points to 53.9. The employment index fell 4.4 points to neutral. The lead times index fell marginally to 51.0. The underlying indicator that has the largest inverse correlation, finished goods inventory, rose an additional 0.3 points to 52.1.

The three-month forecast for the Houston PMI fell 0.8 points to neutral. Strengthening of the prices paid index was offset by weaker sales/new orders and lead times indices. These indices have a strong direct correlation with economic activity at the three-month forecast horizon. This forecast is highly dependent on continued services producing industry strength.

On an industry specific basis, both services producing and goods producing industries indicated moderate growth at a slower pace. Health care, transportation and utilities, and construction reported expansion. As noted above, oil & gas and manufacturing reported contraction. From a three-month forecast standpoint, construction, transportation and utilities, and health care are expected to continue to expand.

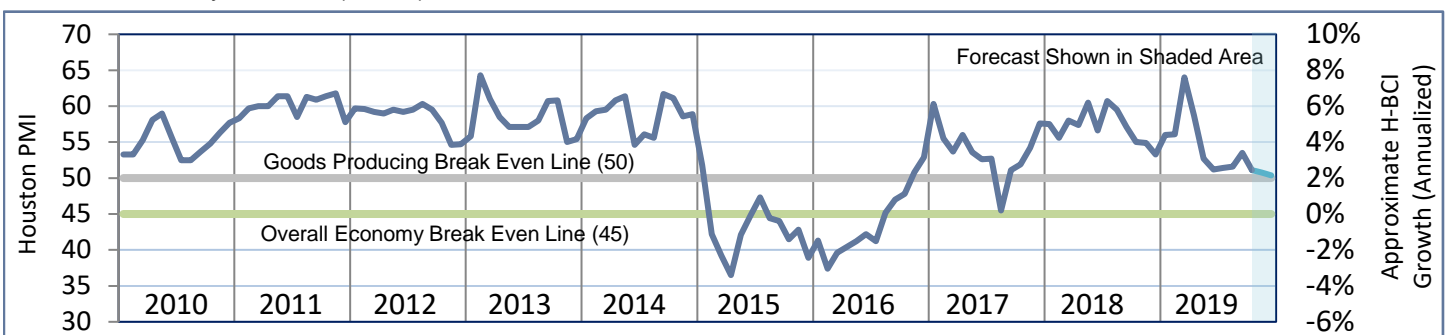
Indices at a Glance

Index	Oct	Sep	Change	Track	Rate	Trend*
Houston PMI - Current	51.1	53.5	-2.4	Expanding	Slower	26
Houston PMI - 3 Month Forecast	50.0	50.8	-0.8	Neutral	Neutral	3
Sales/New Orders	53.9	55.6	-1.7	Rising	Slower	3
Production	49.6	50.8	-1.2	Falling	Fr. Rising	1
Employment	50.0	54.4	-4.4	Neutral	Neutral	26
Purchases	55.1	52.1	3.0	Rising	Faster	8
Prices Paid	49.2	45.9	3.3	Falling	Slower	6
Lead Times	51.0	51.1	-0.1	Rising	Slower	35
Purchased Inventory	53.6	50.0	3.6	Rising	Fr. Neutral	1
Finished Goods Inventory	52.1	51.8	0.3	Rising	Faster	2
Overall Houston Economy				Expanding	Faster	39

* Number of months on current track

Houston PMI Trend

Activity of goods producing industries in Houston has expanded for over two years and overall economic activity has grown for more than three years. 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: Alloy pipe, heat exchangers, fabricated structural steel; electrical equipment and transformers; aggregates; ammonia and bulk gases; software; MTBE

Down in Price: Carbon steel pipe; MRO materials and other non-chemical supplies; C4 raffinates and butadiene

In Short Supply: Craft labor, welders, pipe fitters, electricians, and plant services technicians; tax professionals; cyber security, machine learning, and robotic process automation professionals

Sector Summaries

Oil and Gas Exploration, and Key Support Services:

- The Texas rig count seems to have stabilized while total US count continues to fall
- *Moderate contraction in this sector accelerated during the month; the sales, production and prices paid indices were near neutral; the employment index contracted at a faster pace; lead times continue to increase*

Engineering and Construction:

- Uncertainty tied to global environment
- *Respondents in this sector continue to report expanding sales/new orders, employment, purchases, and prices paid indices; all other indices are near neutral*

Manufacturing - Durable Goods:

- Until the rig count stabilizes, manufacturing for the energy industry will be difficult to predict
- *This sector reported modest improvement this month; the sales/new orders index expanded at a reasonable pace; finished goods inventories are rising at a slower pace; all other indicators reported near neutral*

Manufacturing - Non-Durable Goods:

- Definitely seeing softening demand
- Polymer prices have fallen throughout the year and continue to see downward pressure
- *This sector is now reporting moderate contraction; the sales/new orders index showed a significant decline as did the prices paid and lead times indices; inventories rose marginally*

Transportation and Utilities (including mid-stream operations):

- *This sector continues to show strength with nearly all indicators pointing to expansion*

Professional Services:

- Energy companies continue to hold their spending in both goods and services (including staffing)
- Hiring of direct employees and contingent labor remains low as oil prices remain in the \$50-\$60 range
- We have seen a sizable increase in professionals on the market due to recent mergers
- Continued pressure on lower hourly rates
- *This sector returned to near neutral with all underlying indices ending near the mid-point*

Health Care:

- *This sector continues to report strength; the sales, employment, and purchases indices all reported above neutral again this month; all other indicators were 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. 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.

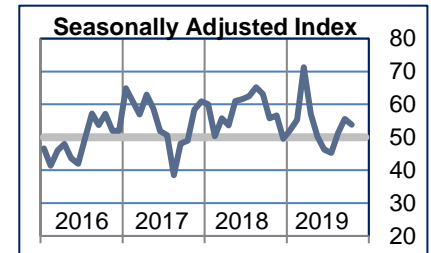
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Sales/New Orders Index

The sales/new orders index fell 1.7 points. Degradation in oil & gas, manufacturing, and professional services were partially offset by strong results in transportation and utilities, construction, and health care.

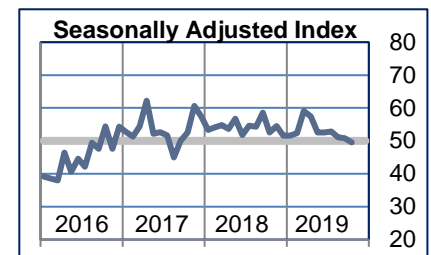
	Higher	Same	Lower	Net	Index
May/19	9%	85%	6%	3%	50.2
Jun/19	13%	68%	19%	-6%	46.2
Jul/19	14%	67%	19%	-5%	45.2
Aug/19	7%	90%	3%	4%	51.3
Sep/19	14%	84%	2%	12%	55.6
Oct/19	10%	87%	3%	7%	53.9



Production Index

The production index fell 1.2 points to end the month below neutral for the first time in over two years. Durable goods manufacturing saw a large reduction in this index to join all other industries near neutral.

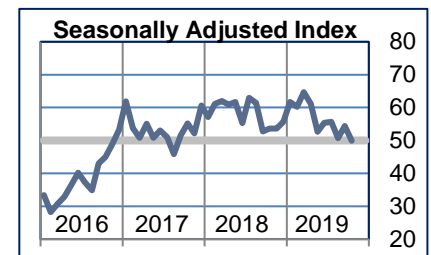
	Higher	Same	Lower	Net	Index
May/19	9%	89%	2%	7%	52.6
Jun/19	6%	93%	1%	5%	52.6
Jul/19	7%	91%	2%	5%	52.9
Aug/19	4%	95%	1%	3%	51.1
Sep/19	6%	90%	4%	2%	50.8
Oct/19	2%	97%	1%	1%	49.6



Employment Index

The employment index fell 4.4 points to end the month at neutral. The reduction was split evenly between goods and services producing industries. Construction and health care showed strength while oil & gas reported weakness.

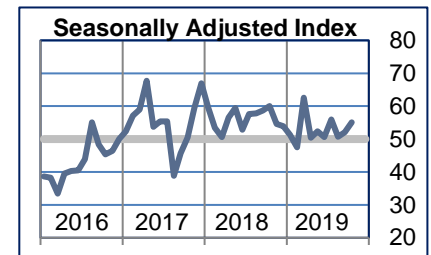
	Higher	Same	Lower	Net	Index
May/19	14%	80%	6%	8%	52.6
Jun/19	22%	72%	6%	16%	55.4
Jul/19	18%	74%	8%	10%	55.6
Aug/19	7%	86%	7%	0%	50.7
Sep/19	13%	84%	3%	10%	54.4
Oct/19	8%	85%	7%	1%	50.0



Purchases Index

The purchases index rose 3 points with strengthening in both services and goods producing industries. Transportation and utilities, oil & gas, and construction all reported increases in this index.

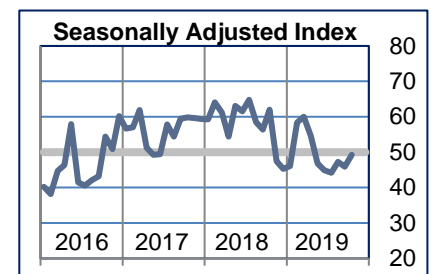
	Higher	Same	Lower	Net	Index
May/19	6%	92%	2%	4%	52.3
Jun/19	7%	90%	3%	4%	50.6
Jul/19	12%	86%	2%	10%	56.0
Aug/19	8%	89%	3%	5%	50.7
Sep/19	13%	84%	3%	10%	52.1
Oct/19	11%	88%	1%	10%	55.1



Prices Paid Index

The prices paid index rose 3.3 points to remain below neutral. Construction, and transportation and utilities reported this index as rising at a rapid pace, while manufacturing reported it as falling.

	Higher	Same	Lower	Net	Index
May/19	8%	82%	10%	-2%	46.8
Jun/19	8%	76%	16%	-8%	44.9
Jul/19	6%	75%	19%	-13%	44.2
Aug/19	3%	89%	8%	-5%	47.3
Sep/19	1%	92%	7%	-6%	45.9
Oct/19	6%	88%	6%	0%	49.2



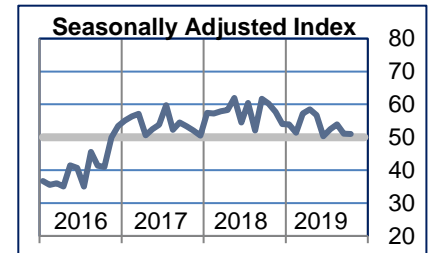
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Lead Times Index

The lead times index was relatively flat. Lead times fell to near neutral in construction and well below neutral in manufacturing. Transportation and utilities joined oil & gas reporting increased lead times.

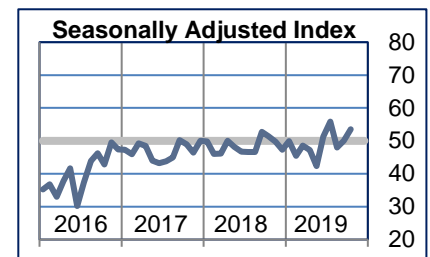
	Higher	Same	Lower	Net	Index
May/19	15%	84%	1%	14%	56.7
Jun/19	2%	97%	1%	1%	50.3
Jul/19	6%	93%	1%	5%	52.5
Aug/19	15%	81%	4%	11%	53.9
Sep/19	5%	94%	1%	4%	51.1
Oct/19	6%	89%	5%	1%	51.0



Purchased Inventory Index

The purchased inventory index rose 3.6 points with most of the increase coming from changes in oil & gas and durable goods manufacturing. All other sectors came in near neutral.

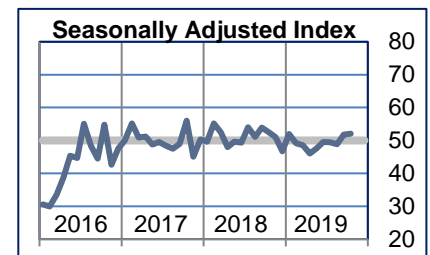
	Higher	Same	Lower	Net	Index
May/19	3%	84%	13%	-10%	42.4
Jun/19	5%	93%	2%	3%	51.3
Jul/19	14%	85%	1%	13%	55.9
Aug/19	5%	87%	8%	-3%	48.0
Sep/19	1%	95%	4%	-3%	50.0
Oct/19	2%	96%	2%	0%	53.6



Finished Goods Inventory Index

The finished goods inventory index rose marginally during the month. All industries reported this index near neutral.

	Higher	Same	Lower	Net	Index
May/19	6%	83%	11%	-5%	47.6
Jun/19	2%	96%	2%	0%	49.6
Jul/19	1%	97%	2%	-1%	49.4
Aug/19	4%	91%	5%	-1%	48.8
Sep/19	2%	97%	1%	1%	51.8
Oct/19	1%	98%	1%	0%	52.1



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).

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