

Modest Expansion Continues Six of Eight Indicators Pointing to Growth

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(Houston, Texas) – Area Supply Chain leaders indicate that economic activity in Houston expanded for the third month in a row during December.

The Houston Purchasing Managers Index (H-PMI) rose from its November level of 50.5 to 50.7 in December, only its third month above neutral since late 2014. The Sales/New Orders index pointed towards expansion for the fifth month. The Production, Employment, Purchases, and Lead Times indices all moved back to indicating expansion. The Prices Paid index, one of only two indicators that are inversely correlated to economic activity during most of the economic cycle, is now significantly above neutral. However, during the initial part of a recovery, this indicator often moves in the same direction as the economy. The remaining inverse indicator, Finished Goods Inventory, is now pointing to near term expansion for the second month.

The Sales/New Orders Index was flat at 52.0. The Production Index rose 6.7 points to 54.3. The Employment Index rose from 48.9 to 53.3 points, its highest level in two years. The Purchases Index rose 3.6 points to 50.0. The Prices Paid Index rose 9.3 points to 60.2. The Lead Times Index registered 53.4, up from 49.9. The Purchased Inventory Index fell 2.1 points to 47.4. The Finished Goods Inventory Index rose from 42.7 to 47.5.

Durable goods manufacturing and wholesale trade continue to show strong indications of near term expansion. Oil & gas is also expanding, albeit at a slower pace. Non-durable goods manufacturing is showing contraction. All other industries are indicating near neutral performance.

INDICES AT A GLANCE

Index	Dec	Nov	Change	Track	Rate	Trend*
Houston PMI	50.7	50.5	0.2	Expanding	Faster	3
Sales/New Orders	52.0	52.0	0.0	Rising	Unchanged	5
Production	54.3	47.6	6.7	Rising	Fr. Falling	1
Employment	53.3	48.9	4.4	Rising	Fr. Falling	1
Purchases	50.0	46.4	3.6	Neutral	Fr. Falling	1
Prices Paid	60.2	50.9	9.3	Rising	Faster	3
Lead Times	53.4	49.9	3.5	Rising	Fr. Falling	1
Purchased Inventory	47.4	49.5	-2.1	Falling	Faster	25
Finished Goods Inventory	47.5	42.7	4.8	Falling	Slower	2

* Months on current track



Commodities Reported Up in Price: Petrochemical feedstocks; energy; completion services; oil country tubular goods; copper products, carbon steel and alloy pipe, fabricated structural steel; vaccines and custom pharmaceuticals

Commodities Reported Down in Price: Pumps and compressors; ocean freight; computers and components; office supplies

Commodities Reported in Short Supply: Completion services; oil country tubular goods; custom pharmaceuticals

WHAT OUR RESPONDENTS ARE SAYING AND SUMMARIES BY SECTOR

Oil and Gas Exploration, and Key Support Services:

- OPEC production cuts are giving the suppliers ammunition to raise prices even though commodity prices are virtually unchanged
- Overall, respondents in this sector returned to reporting expansion; sales, production, and purchases were up; prices month over month were up; employment was down again

Engineering and Construction:

- Overall respondents in this area indicate modest movement towards recovery; new orders and prices were up during the month; employment and purchases continued to track lower

Manufacturing - Durable Goods:

- Down from last month in most areas, but unusually active for December
- This sector continues to report improvement; sales and production increased; employment, prices, and lead times were stable

Manufacturing - Non-Durable Goods:

- Slight increase in prices at the pump is creating a decrease in sales volumes
- Overall respondents in this area continue to report slow activity

Wholesale Trade:

- Major Vendors are holding price; some smaller vendors are raising prices 1-2 percent
- Respondents in this sector report continued strengthening; employment and lead times moved up; other indices were just above neutral

Health Care:

- Our large expansion is offering great career opportunities
- This sector continues to show modest expansion with most indicators reported near neutral

ISM-Houston

Business Report

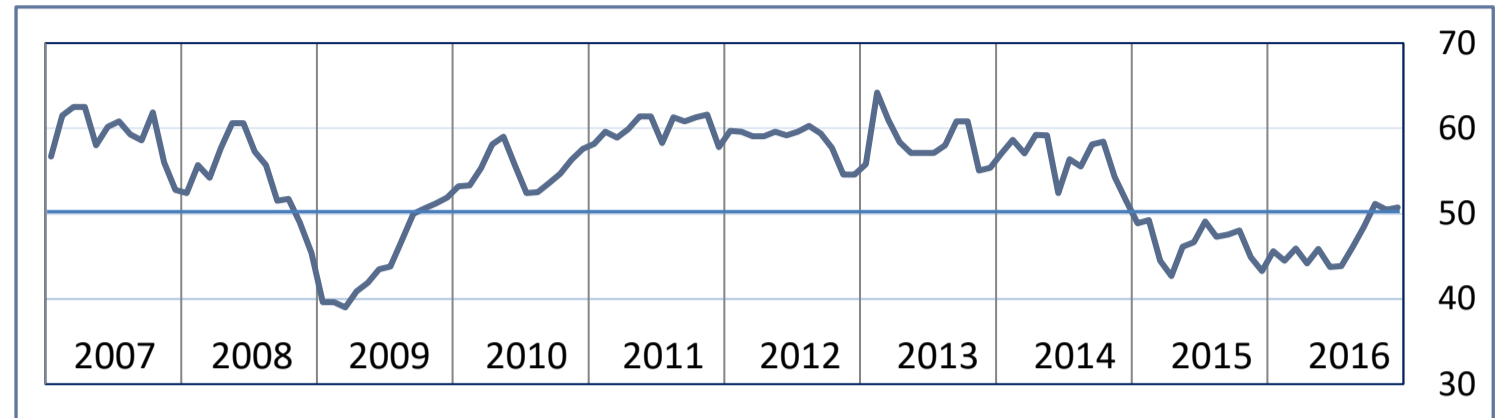


ISM—Houston, Inc.

December 2016

Houston PMI Trend

The Houston PMI indicates likely shifts in economic activity three or four months in advance. Readings over 50 generally indicate expansion over the near term; readings below 50 show coming contraction.



Trend of Underlying Indicators

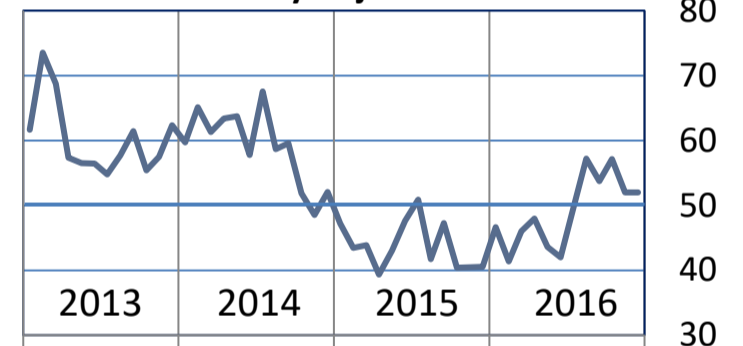
The Houston PMI is based on diffusion indices for eight underlying indicators as shown below. The net value of each of these indicators is simply the percentage of respondents who cite a positive shift from the previous month minus the percentage who cite a negative shift. The diffusion index is calculated based on the percent of respondents reporting higher results plus one-half of those responding the same with a seasonal adjustment based on an X12 ARIMA forecast using the previous 12 years data. Seasonally adjusted values above 50 for the Sales/New Orders, Production, Employment, Purchases, Lead Times and Purchased Inventory indicators point towards expansion and values below 50 signal contraction. The Prices Paid and Finished Goods Inventory indicators are inversely correlated to economic activity, meaning that values below 50 point to expansion and values above point to contraction.

Sales/New Orders

	% Higher	% Same	% Lower	Net	Index
Jul/16	26	48	26	0	49.5
Aug/16	23	71	6	17	57.2
Sep/16	14	80	6	7	53.7
Oct/16	28	56	16	12	57.1
Nov/16	15	70	15	0	52.0
Dec/16	12	75	13	-1	52.0

Sales rose, aided by seasonal adjustments. Durable goods manufacturing reported significant improvement again this month. Non-durable goods sales fell during the month.

Seasonally Adjusted Index

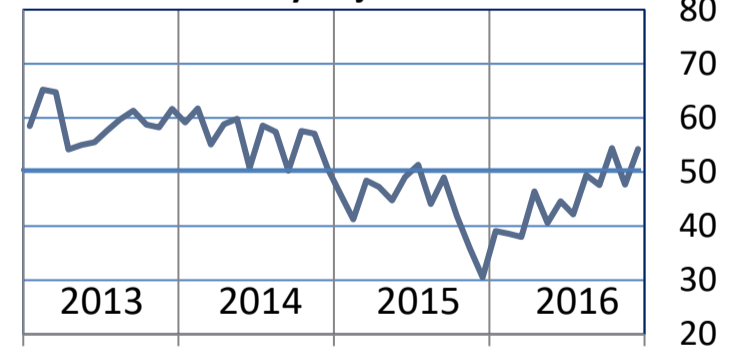


Production

	% Higher	% Same	% Lower	Net	Index
Jul/16	1	81	18	-17	42.1
Aug/16	3	94	3	0	49.4
Sep/16	0	96	4	-4	47.6
Oct/16	16	76	8	8	54.4
Nov/16	2	91	7	-5	47.6
Dec/16	5	95	0	5	54.3

Production returned to expanding overall with durable goods manufacturing and oil & gas reporting significant improvement. All other industries reported near neutral.

Seasonally Adjusted Index

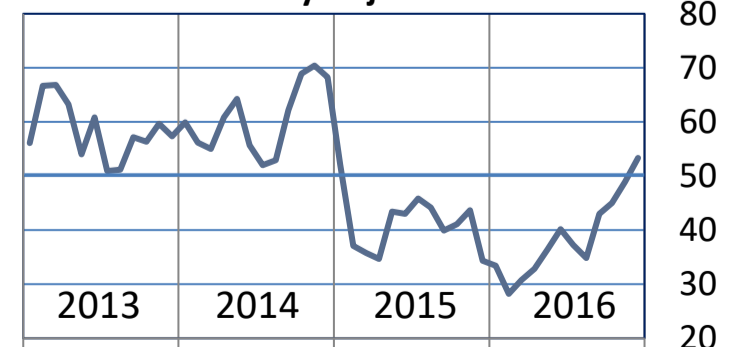


Employment

	% Higher	% Same	% Lower	Net	Index
Jul/16	14	47	39	-25	37.3
Aug/16	3	66	31	-28	34.9
Sep/16	4	79	17	-13	43.0
Oct/16	12	64	24	-12	45.0
Nov/16	8	78	14	-6	48.9
Dec/16	13	75	12	1	53.3

Employment rose for the first time in two years. Wholesale trade reported strong improvement. Construction, non-durable goods manufacturing, and oil & gas reported further reductions.

Seasonally Adjusted Index



ISM-Houston Business Report

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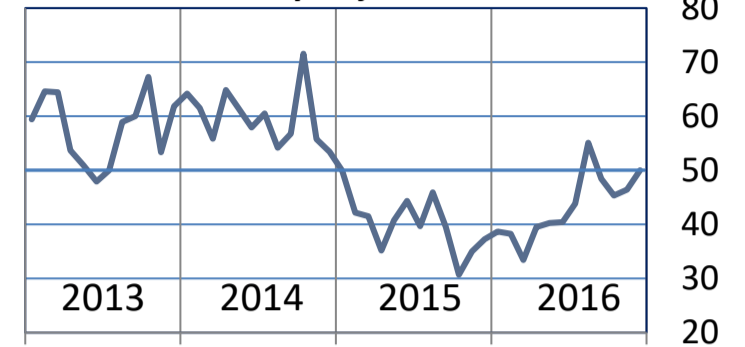


Purchases

	% Higher	% Same	% Lower	Net	Index
Jul/16	26	32	42	-15	43.9
Aug/16	23	67	10	13	55.1
Sep/16	13	77	10	2	48.4
Oct/16	20	52	28	-8	45.4
Nov/16	12	68	20	-8	46.4
Dec/16	11	71	18	-7	50.0

Purchases were unchanged, with a considerable upside effect due to seasonal adjustments. Continued weakness was reported for construction and non-durable goods manufacturing.

Seasonally Adjusted Index

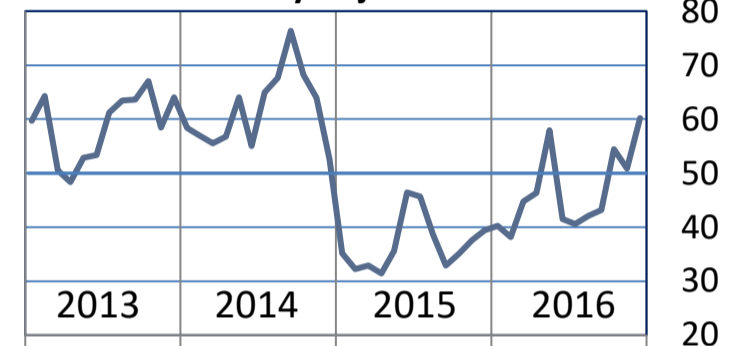


Prices Paid

	% Higher	% Same	% Lower	Net	Index
Jul/16	11	56	33	-22	40.6
Aug/16	4	75	21	-17	42.1
Sep/16	0	85	15	-15	43.2
Oct/16	20	68	12	8	54.4
Nov/16	11	80	9	1	50.9
Dec/16	16	84	0	16	60.2

Prices paid rose at a strong pace with oil & gas, construction, manufacturing, and wholesale trade all reporting significant increases. No industry reported price contraction.

Seasonally Adjusted Index

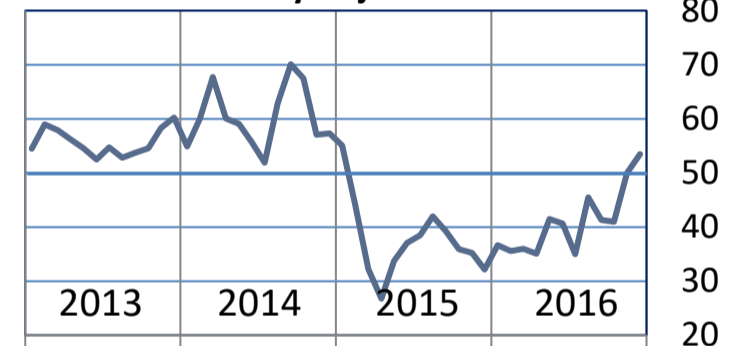


Lead Times

	% Higher	% Same	% Lower	Net	Index
Jul/16	1	68	31	-29	35.0
Aug/16	4	83	13	-10	45.5
Sep/16	0	81	19	-19	41.3
Oct/16	8	64	28	-20	41.0
Nov/16	8	83	9	-1	49.9
Dec/16	12	81	7	5	53.4

Lead times moved above neutral during the month with oil & gas and wholesale trade reporting large increases. Only non-durable goods manufacturing reported an overall decrease.

Seasonally Adjusted Index

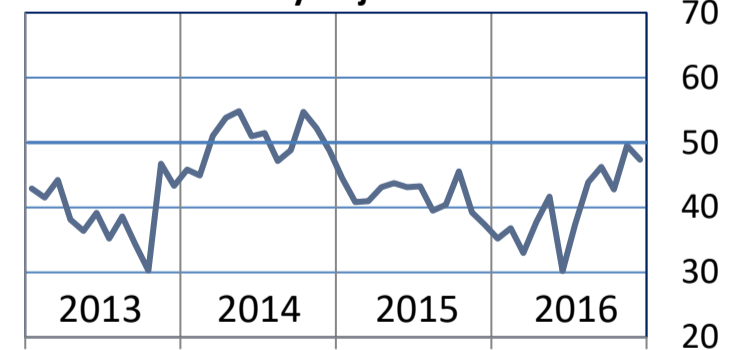


Purchased Inventory

	% Higher	% Same	% Lower	Net	Index
Jul/16	6	65	29	-24	37.4
Aug/16	1	87	12	-11	43.9
Sep/16	0	88	12	-12	46.3
Oct/16	4	68	28	-24	42.8
Nov/16	1	94	5	-4	49.5
Dec/16	0	88	12	-12	47.4

Purchased goods inventories continue to fall modestly, however, most industries reported near neutral.

Seasonally Adjusted Index



Finished Goods Inventory

	% Higher	% Same	% Lower	Net	Index
Jul/16	22	65	13	10	55.1
Aug/16	5	86	9	-5	48.4
Sep/16	4	79	17	-13	44.5
Oct/16	12	72	16	-4	54.8
Nov/16	1	86	13	-12	42.7
Dec/16	6	85	9	-4	47.5

Finished goods inventories fell with most industries reporting just below neutral.

Seasonally Adjusted Index

