

Houston PMI Indicates Continued Near Term Growth

Durable Goods Manufacturing and Oil & Gas Strengthen Further

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(Houston, Texas) – Economic activity in Houston expanded for the fifth month in a row during February according to area Supply Chain leaders. The Houston Purchasing Managers Index (H-PMI) registered 54.2, unchanged from January.

Five underlying indicators are now pointing towards expansion for at least the next 3-4 months. The Sales/New Orders index completed its 7th month indicating near term expansion, registering 60.8 in February, a decrease of 4.1 points. The Production, Employment, Purchases, and Lead Times indices have now completed one quarter indicating expansion. The Production index registered 51.3, a modest decline of 1.5. The Employment index registered 53.7, falling 8.2 points. The Purchases index registered 57.2, up 4.9 points. The Lead Times index registered 56.3, rising a modest 1.2 points. All of these indicators are directly correlated with economic activity.

Two underlying indicators are pointing to contraction near term. The Purchased Inventory (Raw Materials) index completed its 27th month indicating contraction near term, registering 45.9, down 1.4 points. This indicator is also directly correlated to economic activity. The Finished Goods Inventory index registered 55.2, up 5.1 points, completing its 2nd month pointing to contraction. This indicator is inversely correlated to economic activity.

The last underlying indicator, Prices Paid, is also inversely correlated to the economy over most of the economic cycle. However, it can show a direct correlation during the early stages of a recovery. The Prices Paid index registered 57.9, up 0.4 points.

On an industry specific basis, oil & gas, durable goods manufacturing, wholesale trade, and professional services are now expanding. All other sectors are indicating minimal month to month economic change.

INDICES AT A GLANCE

Index	Feb	Jan	Change	Track	Rate	Trend*
Houston PMI	54.2	54.2	0.0	Expanding	Unchanged	5
Sales/New Orders	60.8	64.9	-4.1	Rising	Slower	7
Production	51.3	52.8	-1.5	Rising	Slower	3
Employment	53.7	61.9	-8.2	Rising	Slower	3
Purchases	57.2	52.3	4.9	Rising	Faster	3
Prices Paid	57.0	56.6	0.4	Rising	Faster	5
Lead Times	56.3	55.1	1.2	Rising	Faster	3
Purchased Inventory	45.9	47.3	-1.4	Falling	Faster	27
Finished Goods Inventory	55.2	50.1	5.1	Rising	Faster	2

* Months on current track



Commodities Reported Up in Price: Alloy and carbon pipe; copper based products; pumps and compressors; exchangers; ready mix concrete; vaccines and custom pharmaceuticals

Commodities Reported Down in Price: Europe to US ocean freight; computers and components

Commodities Reported in Short Supply: Compression equipment (engines); custom pharmaceuticals

WHAT OUR RESPONDENTS ARE SAYING AND SUMMARIES BY SECTOR

Oil and Gas Exploration, and Key Support Services:

- Company still repositioning staff levels to meet internal cost objectives
- Tightening in the market with activity pick up; equipment/services lead times are stretching out
- Overall, respondents in this sector reported expansion at a faster pace this month; sales, production, purchases, prices, and lead times, and inventories all increased; employment fell

Engineering and Construction:

- Overall, respondents in this area indicate performance consistent with last month; new orders remain flat; prices are up modestly; employment and purchases continued to track lower

Manufacturing - Durable Goods:

- The demand for manufactured goods continues to get better as the Energy Industry recovers
- This sector reported further improvement; all indicators were reported as up or neutral

Manufacturing - Non-Durable Goods:

- Our downstream units are trying to catch up on maintenance programs that were put on hold
- Respondents in this area reported overall performance returning to near neutral; production was up; employment and purchases were down

Wholesale Trade:

- Respondents in this sector reported strengthening at a faster pace; sales, employment, purchases, prices, lead times and inventories all moved up

Professional Services:

- Respondents in this area indicated further strengthening; contract staffing and direct hire services efforts continue to improve

Health Care:

- Hiring has picked up; expansion is booming
- This sector continues to show modest expansion with most indicators reported near neutral; purchases were reported as up

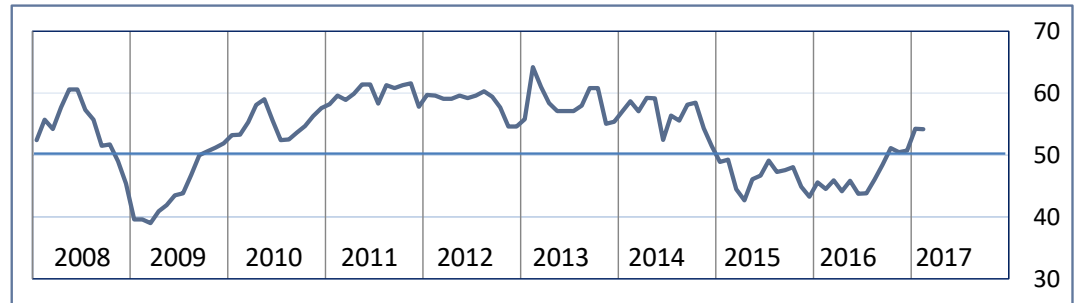
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Business Report

February 2017

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.



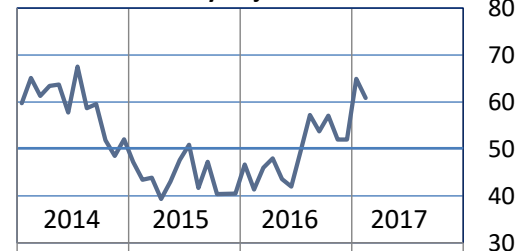
Trend of Underlying Indicators

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	
Sep/16	14	80	6	7	53.7	The sales/new orders index continued to grow at a strong pace with oil & gas, wholesale trade, durable goods manufacturing, and professional services showing gains. No sector report overall sales reductions.
Oct/16	28	56	16	12	57.1	
Nov/16	15	70	15	0	52.0	
Dec/16	12	75	13	-1	52.0	
Jan/17	35	60	5	30	64.9	
Feb/17	30	66	4	25	60.8	

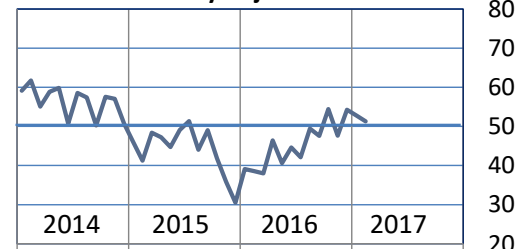
Seasonally Adjusted Index



Production

	% Higher	% Same	% Lower	Net	Index	
Sep/16	0	96	4	-4	47.6	The production index increased at a slower pace. Oil & gas, durable goods manufacturing, and non-durable goods manufacturing continued to show considerable strength. All other sectors reported near neutral.
Oct/16	16	76	8	8	54.4	
Nov/16	2	91	7	-5	47.6	
Dec/16	5	95	0	5	54.3	
Jan/17	8	92	0	8	52.8	
Feb/17	9	90	1	7	51.3	

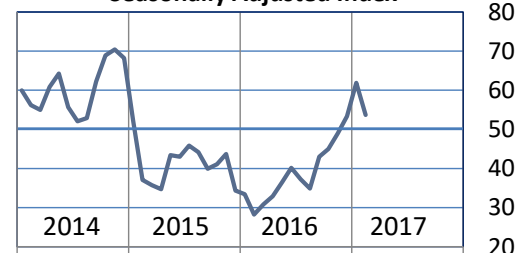
Seasonally Adjusted Index



Employment

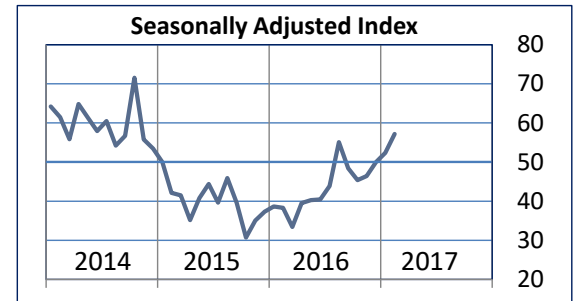
	% Higher	% Same	% Lower	Net	Index	
Sep/16	4	79	17	-13	43.0	The employment index grew at a lower rate with oil & gas joining non-durable goods manufacturing and construction showing contraction. Durable goods manufacturing and professional services showed increases.
Oct/16	12	64	24	-12	45.0	
Nov/16	8	78	14	-6	48.9	
Dec/16	13	75	12	1	53.3	
Jan/17	29	59	12	17	61.9	
Feb/17	20	68	12	7	53.7	

Seasonally Adjusted Index



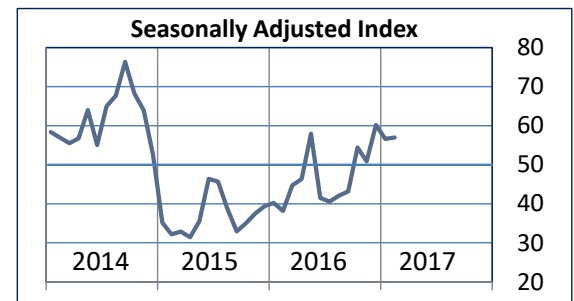
Purchases

	% Higher	% Same	% Lower	Net	Index	
Sep/16	13	77	10	2	48.4	The purchases index increased at a faster pace. Healthcare, durable goods manufacturing, wholesale trade, and oil & gas showed strong improvement. Non-durable goods manufacturing and construction purchases fell.
Oct/16	20	52	28	-8	45.4	
Nov/16	12	68	20	-8	46.4	
Dec/16	11	71	18	-7	50.0	
Jan/17	20	68	12	8	52.3	
Feb/17	24	69	7	17	57.2	



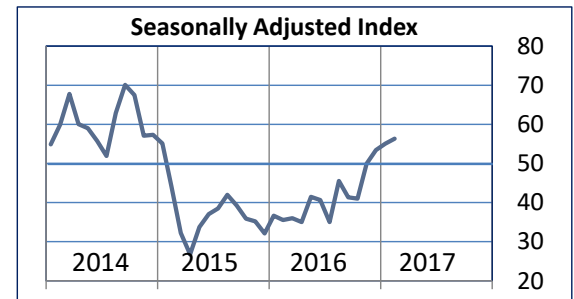
Prices Paid

	% Higher	% Same	% Lower	Net	Index	
Sep/16	0	85	15	-15	43.2	The prices paid index rose at about the same pace This month. Oil & gas, durable goods manufacturing, construction, and wholesale trade reported increases. All other sectors reported prices as unchanged.
Oct/16	20	68	12	8	54.4	
Nov/16	11	80	9	1	50.9	
Dec/16	16	84	0	16	60.2	
Jan/17	17	83	0	17	56.6	
Feb/17	19	77	4	14	57.0	



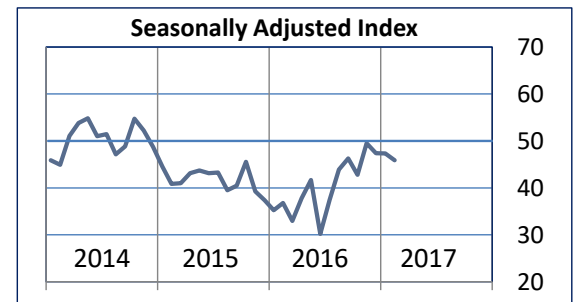
Lead Times

	% Higher	% Same	% Lower	Net	Index	
Sep/16	0	81	19	-19	41.3	The lead times index rose at a moderately faster pace this month with oil & gas, durable goods, and wholesale trade reporting higher delivery times. All other sectors reported near neutral.
Oct/16	8	64	28	-20	41.0	
Nov/16	8	83	9	-1	49.9	
Dec/16	12	81	7	5	53.4	
Jan/17	7	93	0	7	55.1	
Feb/17	16	83	1	14	56.3	



Purchased Inventory

	% Higher	% Same	% Lower	Net	Index	
Sep/16	0	88	12	-12	46.3	The purchased goods inventory index fell at a faster pace with respondents in the durable goods manufacturing space consistently reporting reductions. Most other industries reported near neutral.
Oct/16	4	68	28	-24	42.8	
Nov/16	1	94	5	-4	49.5	
Dec/16	0	88	12	-12	47.4	
Jan/17	6	89	5	1	47.3	
Feb/17	4	89	7	-3	45.9	



Finished Goods Inventory

	% Higher	% Same	% Lower	Net	Index	
Sep/16	4	79	17	-13	44.5	The finished goods inventory index rose at a faster pace with durable goods manufacturing and oil & gas reporting increased inventories. All other industries reported near or just below neutral.
Oct/16	12	72	16	-4	54.8	
Nov/16	1	86	13	-12	42.7	
Dec/16	6	85	9	-4	47.5	
Jan/17	11	87	2	10	50.1	
Feb/17	15	84	1	14	55.2	

