

Houston Economy Grows at a Slower Pace in March

Non-Durable Goods Manufacturing and Transportation Strengthen

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(Houston, Texas) – Economic activity in Houston expanded for the sixth month in a row during February according to area Supply Chain leaders. The Houston Purchasing Managers Index (H-PMI) registered 51.4, down from its February level of 54.2.

Five underlying indicators continue to point towards expansion for the 3-4 month forecast horizon. The Sales/New Orders index completed its 8th month indicating expansion, registering 56.9 in March, down from 60.8 in February. The Production, Employment, Purchases, and Lead Times indices have now completed four months indicating expansion. The Production index registered 54.4, a strong increase from 51.3 in February. The Employment index registered 50.8, falling an additional 2.9 points. The Purchases index registered 59.0, up 1.8 points. The Lead Times index registered 57.2, rising 0.9 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 28th month indicating contraction near term, registering 49.3, up 3.4 points. This indicator is also directly correlated to economic activity. The Finished Goods Inventory index registered 50.9, down 4.3 points, completing its 3rd month pointing to contraction. This indicator is inversely correlated to economic activity.

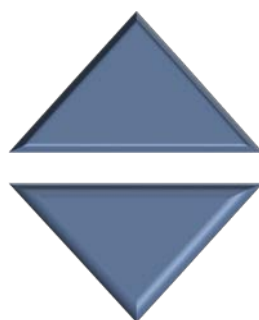
The last underlying indicator, Prices Paid, is also inversely correlated to the economy over most of the economic cycle. However, it can show a direct correlation during the early stages of a recovery. The Prices Paid index registered 61.9, up 4.9 points.

On an industry specific basis non-durable goods manufacturing and transportation (mid-stream operations) joined oil & gas, durable goods manufacturing, and wholesale trade as expanding. Construction has moved back to contraction. All other sectors are indicating minimal month to month change.

INDICES AT A GLANCE

Index	Mar	Feb	Change	Track	Rate	Trend*
Houston PMI	51.4	54.2	-2.8	Expanding	Slower	6
Sales/New Orders	56.9	60.8	-3.9	Rising	Slower	8
Production	54.4	51.3	3.1	Rising	Faster	4
Employment	50.8	53.7	-2.9	Rising	Slower	4
Purchases	59.0	57.2	1.8	Rising	Faster	4
Prices Paid	61.9	57.0	4.9	Rising	Faster	6
Lead Times	57.2	56.3	0.9	Rising	Faster	4
Purchased Inventory	49.3	45.9	3.4	Falling	Slower	28
Finished Goods Inventory	50.9	55.2	-4.3	Rising	Slower	3

* Months on current track



Commodities Reported Up in Price: Vaccines and custom pharmaceuticals; natural gas; oil country tubular goods; ready mix concrete, steel and alloy pipe, wire and cable, heat exchangers, and structural steel

Commodities Reported Down in Price: Computers and office supplies; normal butane

Commodities Reported in Short Supply: Custom pharmaceuticals; frac sand and certain sizes of oil country tubular goods

WHAT OUR RESPONDENTS ARE SAYING AND SUMMARIES BY SECTOR

Oil and Gas Exploration, and Key Support Services:

- Seeing a small uptick in hydraulic fracturing activity; not much, but its a start
- Significant price pressure for OCTG and line pipe
- Overall, respondents in this sector reported expansion at a slower pace this month; sales, production, employment, prices, and lead times all increased

Engineering and Construction:

- Overall, respondents in this area indicate performance consistent with last month; new orders fell as did employment and lead times; prices moderated

Manufacturing - Durable Goods:

- With oil prices holding near \$50, manufacturing for oil & gas looks more promising in 2017
- This sector reported further improvement; all indicators were reported as up or neutral

Manufacturing - Non-Durable Goods:

- Although our refinery assets continue to produce steadily to meet demand, the company is aligning resources to meet aggressive cost control measures; this is resulting in staffing realignment and asset divestments
- Respondents in this area reported considerable strengthening; purchases, prices, sales, and production were up; employment and inventories were down

Wholesale Trade:

- Respondents in this sector reported further strengthening; employment, purchases, prices, lead times and inventories all moved up

Professional Services:

- Respondents in this area reported near neutral overall; contract staffing and direct hire services reported increased hiring

Health Care:

- This sector continues to show modest expansion with most indicators reported near neutral

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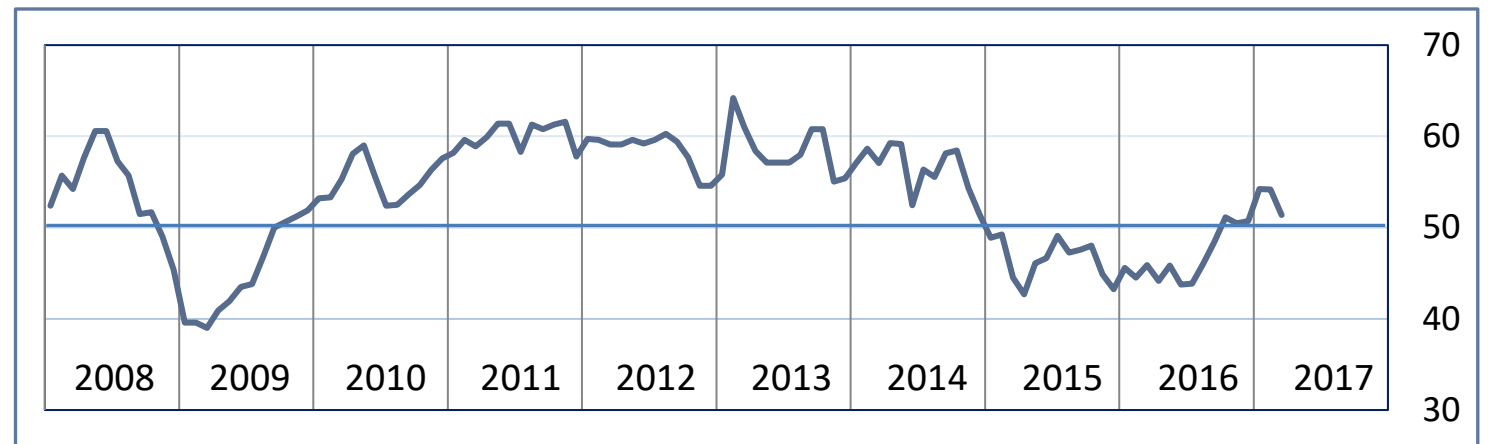


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Houston PMI Trend

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.

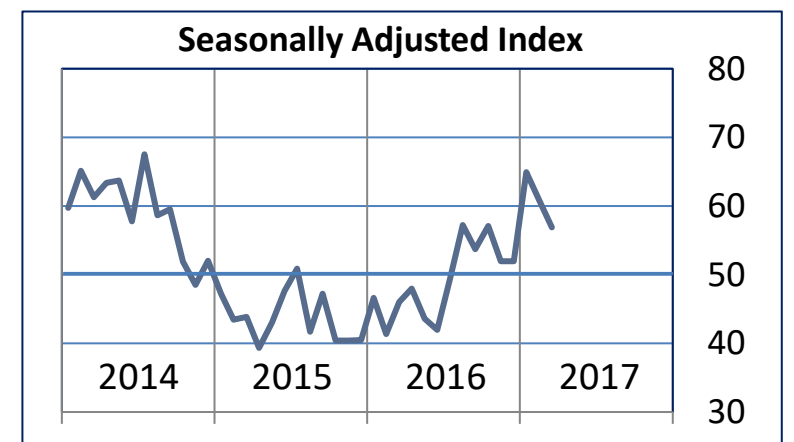


Trend of Underlying Indicators

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.

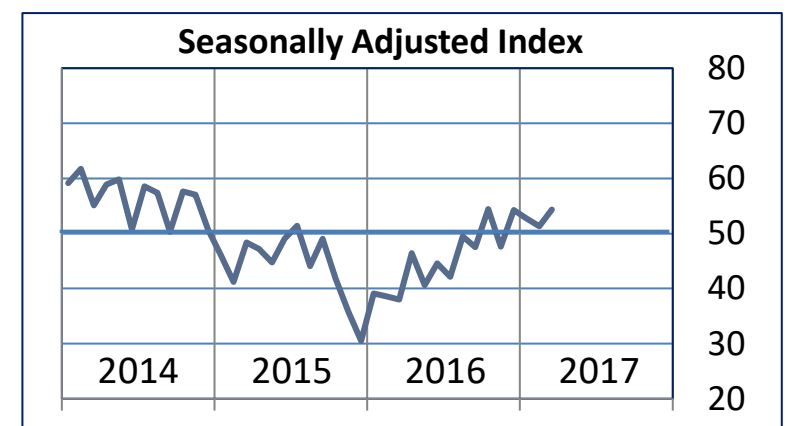
Sales/New Orders

	% Higher	% Same	% Lower	Net	Index	
Oct/16	28	56	16	12	57.1	The sales/new orders index grew at a somewhat slower pace with oil & gas and manufacturing reporting significant gains. Construction reported reduced sales overall. All other sectors reported near neutral.
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	
Mar/17	20	73	7	13	56.9	



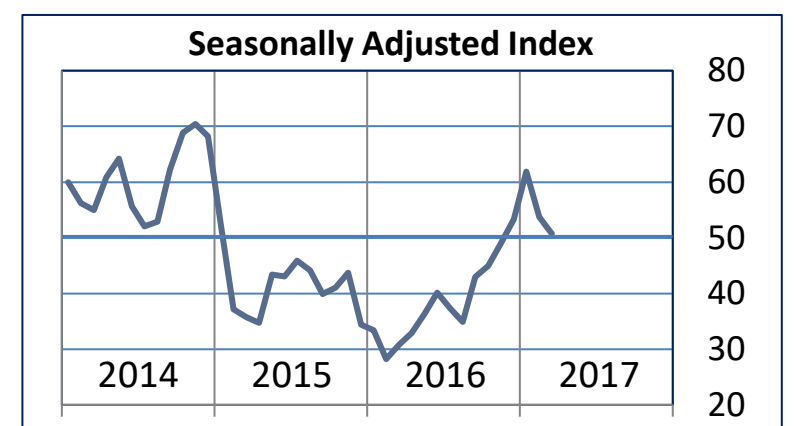
Production

	% Higher	% Same	% Lower	Net	Index	
Oct/16	16	76	8	8	54.4	The production index increased at a faster pace. Oil & gas, durable goods manufacturing, and non-durable goods manufacturing showed further strengthening. All other sectors reported production levels as
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	
Mar/17	9	89	2	7	54.4	



Employment

	% Higher	% Same	% Lower	Net	Index	
Oct/16	12	64	24	-12	45.0	The employment index fell to near neutral with oil & gas, and professional services showing strength. Construction and non-durable goods manufacturing reported further weakness. Other sectors reported as unchanged.
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	
Mar/17	17	70	13	4	50.8	



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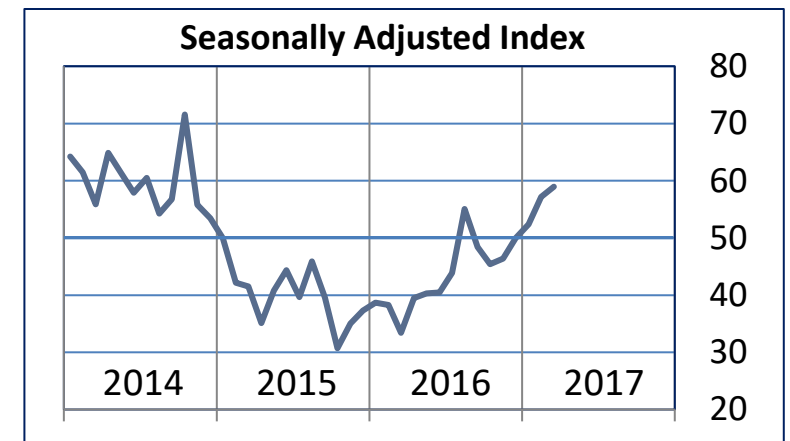
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Purchases

	% Higher	% Same	% Lower	Net	Index
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
Mar/17	28	62	10	18	59.0

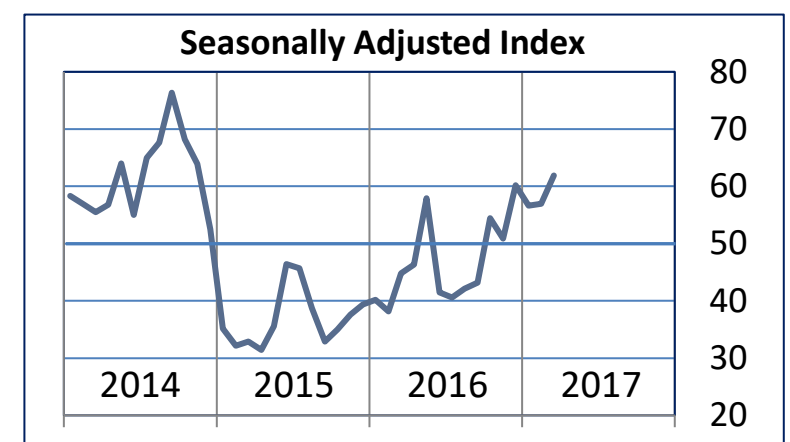
The purchases index rose again this month. Manufacturing, transportation, and wholesale trade showed strong improvement. All other sectors reported as unchanged.



Prices Paid

	% Higher	% Same	% Lower	Net	Index
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
Mar/17	28	70	2	26	61.9

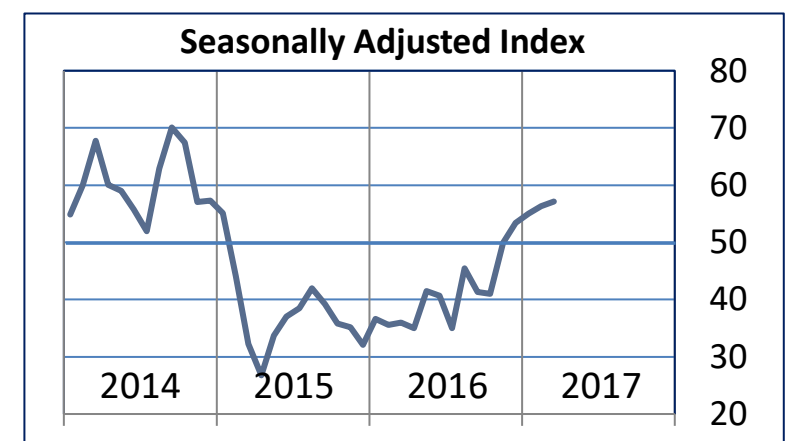
The prices paid index also rose this month. Oil & gas, manufacturing, transportation, wholesale trade and professional services reported increases. All other sectors reported prices as unchanged.



Lead Times

	% Higher	% Same	% Lower	Net	Index
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
Mar/17	19	79	2	17	57.2

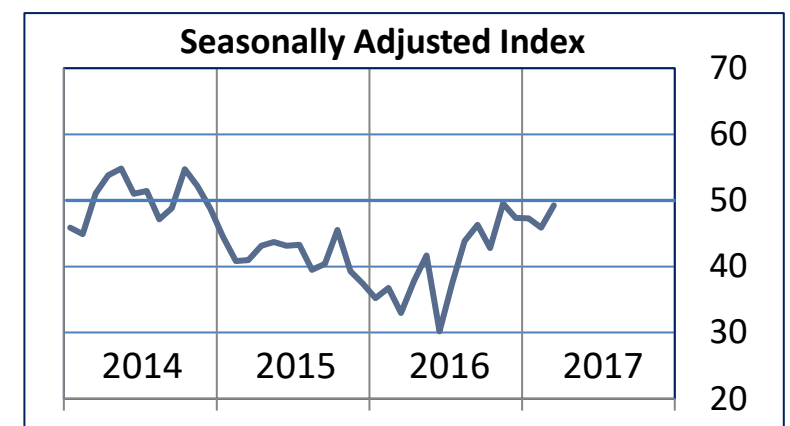
The lead times index rose at a moderately faster pace with oil & gas, non-durable goods manufacturing, transportation, and wholesale trade reporting higher delivery times. Other sectors reported as neutral.



Purchased Inventory

	% Higher	% Same	% Lower	Net	Index
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
Mar/17	6	89	5	1	49.3

The purchased goods inventory index fell at a slower pace with only non-durable goods manufacturing reporting lower inventories. All other respondents reported near neutral.



Finished Goods Inventory

	% Higher	% Same	% Lower	Net	Index
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
Mar/17	6	91	3	3	50.9

The finished goods inventory index fell to near neutral with only wholesale trade reporting an increase. Non-durable goods manufacturing reported lower inventories. All other industries reported near neutral.

