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The oil price downturn will hit these Houston jobs the hardest

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Bill Gilmer, director at the Institute for Regional Forecasting at the Bauer College of Business at the University of Houston, said even businesses that don't say "oil" on the door could be hurting thanks to falling oil prices.

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Reporter- *Houston Business Journal*

Certainly low oil prices have hit Houston oil and gas jobs, but not all jobs are created equal. There are certain levels and functions within the broadly affected sectors that are more at risk than others, according to a recent metro-area forecast from the University of Houston.

"Right at the top of the list, you have oil producers and oilfield services," said Bill Gilmer, director at the Institute for Regional Forecasting at the University of Houston's Bauer College of Business. But it's not just the obvious — it's also consultants and other providers of professional services located in west Houston that are at risk.

"The scientific and consulting jobs — it may not say 'oil' on the door, but that's the work they're doing," said Gilmer.

Gilmer and his team used a simple formula to measure the concentration of various job types in Houston and then forecasted which of the high-concentration jobs are hyper vulnerable while current market conditions persist.

The figures in the left-hand column of the accompanying chart are calculated by taking a sector's percentage of total employment in Houston and dividing it by a sector's percentage of total employment nationwide. If the figure is greater than one, that shows there is a high concentration of jobs in that particular sector in Houston. For example, the figure is 3.44 for oil and gas in Houston, reflecting a very high concentration of jobs in that sector.

The jobs in red are the most at risk, and **the jobs in green are the least at risk**. Coincidentally, the majority of at-risk jobs, particularly white-collar, at-risk jobs, are in **west** Houston.

Houston has 366,786 jobs in the red zone, 784,097 in the red or yellow zone and 207,437 in the green zone.

A breakdown of Houston's at-risk jobs during the oil price downturn:

HOUSTON METRO ENERGY JOBS DIRECTLY AFFECTED BY CURRENT EVENTS BY CONCENTRATION AND SECTOR

	concentration	jobs
Oil & Gas	3.44	
Production	6.36	16,015
Services	4.23	33,884
Utilities	1.27	
Construction	1.57	166,850
Manufacturing	0.95	
Refining	4.74	9,362
Chemicals	2.10	31,225
Plastics and rubber	0.61	
Steel products	2.70	2,587
Fabricated materials	1.86	51,533
Machinery	1.94	40,791
Wholesale trade	1.14	132,715
Retail trade	0.89	
Transportation and warehousing	1.25	106,823
Pipeline transportation	10.57	10,433
Warehousing and storage	0.89	12,402
Information	0.64	
Finance and insurance	0.76	
Real estate	1.17	
Professional, scientific, and technical	1.27	
Engineering services	3.13	60,027
Management, scientific and consulting	1.23	25,348
Regional and national headquarters	1.71	104,393
Administrative services	0.94	187,146
Educational services	0.67	
Health care and social assistance	0.79	
Arts, entertainment and recreation	0.81	
Accommodation and food services	0.93	
Other services	1.00	

- most at risk
- somewhat at risk
- least at risk

THE LOCATION QUOTIENT IDENTIFIES INDUSTRIAL CLUSTER

$$R_i = \frac{\text{Percent share of employment in sector i Houston}}{\text{Percent share of employment in sector i in the U.S.}}$$

- If R_i is greater than one, it indicates a larger than normal concentration of activity in Houston
- If R_i is less than one, the industry is not well represented in Houston
- Some goods are inherently local--dry cleaners and grocery stores--and the ratio is typically close to one everywhere

SOURCE: BAUER COLLEGE OF BUSINESS, UNIVERSITY OF HOUSTON

Suzanne Edwards covers money and law for the Houston Business Journal.