









HoustonBusiness

A Perspective on the Houston Economy

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Houston in 1900 Part 3. The Galveston-Houston Rivalry

By 1900, Galveston held a clear edge in port facilities but found itself at the terminus of a poorly developed rail network. Houston was the regional rail hub but could not demonstrate the logic of a second port only 50 miles from Galveston.

alveston is located two miles offshore on one of the many barrier islands along the Gulf of Mexico. Throughout its history, the waters of Galveston Bay attracted Indians, pirates and explorers and served the Gulf Coast as the best natural harbor between New Orleans and Vera Cruz.

After the Texas Revolution, Michel B. Menard and a group of investors gained title to 4,605 acres of land on Galveston Island through a complicated set of financial transactions. They had a new town surveyed and platted at this site, basing the layout on New York and Philadelphia street plans. The Galveston City Co. began selling lots in 1838, and the Texas Legislature incorporated the city the following year.

When Houston and Galveston were founded, the economic roles played by the two cities complemented each other.

With Texas rivers mostly uncharted and none of them navigable for any significant distance, Houston's location was strategically chosen at the most interior point in the state that could be served by water transportation on a year-round basis. Houston was a river port, accepting agricultural produce from the rich bottomlands along the Brazos and Colorado rivers and shipping it to Galveston by barge or steamboat for export from the state.1 Of all the exports leaving Texas through Galveston before the Civil War, 80 percent would have arrived in Galveston via Houston and the Buffalo Bayou.2 Warehousing and shipping became Galveston's main commercial activity.

Initially, both cities earned a profitable living off of geography by providing noncompetitive transportation services. Over time, this cooperative relationship eroded as shallowdraft steamships, railroads and port improvements shifted the balance of power from one city to the other. Both Houston and Galveston aspired to greatness from their inception—the use of

New York City as a model for Galveston streets, for example, was not without forethought. In many ways, the two new cities were economic twins: located 50 miles apart, settled by Southerners, drawing on the same agricultural wealth, built on transportation services and led mainly by members of the commercial elite.

By the 1850s, the relationship began to turn into a powerful economic rivalry, for only one of the cities could possibly achieve national or international status. Historians disagree on whether Houston won the battle and Galveston lost or whether geography and technical change ultimately made a Houston victory inevitable. They do agree, however, that Galveston never recovered from the 1900 hurricane, at least in terms of its dream of becoming a major metropolitan area (Figure 1). The hurricane made the logic of an inland port on the Texas Gulf Coast clear to all.

This article tracks the Houston –Galveston rivalry from its inception in the 1850s to its end at the start of the 20th century. The story is of interest as an economic history of Houston. But it also illustrates how geography can build economies and how changing transportation technology can enhance or erode a city's competitive position over time. The leadership of both cities sought to parlay geographic advantage in this civic rivalry.

Roots of the Rivalry

The first skirmish between Houston and Galveston came in the 1850s, and it was fought over the orientation of Texas railroads.³ Both cities recognized that the coming of the rails would largely end river

transportation in the state—that railroads would be the key to moving product from the state's rich agricultural regions. The battle would ultimately turn on two questions: Should the orientation of the rail system be north—south or east—west? And should ownership of the railroads be in state or corporate hands?

The transcontinental plan advocated by Houstoniansthe conventional program of the times—sought an east-west system developed by private corporations with public subsidies. This system would converge on Houston, making the city the center of the Texas rail network. Corporate railroad promoters demanded government subsidies, mostly in the form of land grants and loans, arguing they were necessary to promote railroads in a region devoid of native capital and lacking the population base and industry needed to support heavy rail traffic.

Galvestonians, in turn, advocated a rail system fanning out from their city and running north to south. The initial advocate of this plan was Galveston *News* editor Willard Richardson, a combative and persuasive person

devoted to the city and various Southern causes. The system's advantage, he argued, was that it would keep Texas goods within the state, whereas connection to an eastwest grid would divert Texas cotton to New Orleans and St. Louis.

The problem with the Galveston plan was that it ran against a strong national tide of transcontinental construction, and it was impossible to secure private financing for such a project. In the mid-1850s, the Galveston plan evolved into a proposal for state ownership of the rail system. The Compromise of 1850 had settled the dispute between Texas and the United States over the Texas-New Mexico boundary, paid the state debt and left \$5 million in bonds in state coffers. Just as corporate interests wanted a share of these funds for rail subsidies. so did Lorenzo Sherwood, a Galvestonian who in the early 1850s devised a plan to use these surpluses to finance a 1,000-mile, state-owned rail network in Texas.

The plan was politically attractive in populist Texas, but both the plan and Sherwood's nonconformist ways ultimately proved unpopular with Galveston's leadership. Sherwood was driven from the Texas Legislature in 1856 for his abolitionist views, and a month later the legislature authorized a \$6,000 loan, backed by the U.S. bonds, for every mile of railroad track laid in Texas. With this legis-

Figure 1 Population of Galveston and Houston, 1860-1940 Thousands 400 -Houston 350 300 -250 200 150 100 50 Galveston 1930 1890 1900 1910 1940 1860 1870 1880 1920 SOURCE: U.S. Census Bureau

lation, plus a state subsidy authorized in 1854 of 16 sections of land for each mile of track laid, the transcontinental plan cleared its final obstacle.

The decision was critical for Houston because the railroads provided a much-needed counterweight to Galveston's advantages as a Gulf harbor. The first Texas railroad was the Buffalo Bayou, Brazos and Colorado, which opened in 1853 and reached Houston in 1856. By the time the Civil War began, Houston had captured the rail network along the Texas Gulf; of the 492 miles of track in Texas, 350 led to Houston.

Galveston was slower to take an active interest in railroads on the assumption that Galveston was Houston's port and that what was good for Houston was generally good for Galveston. For example, the Houston and Texas Central Railway Co. added more than any other line to Houston's rail presence, ultimately becoming a major link in the Southern Pacific's transcontinental system. However, the railroad had originally been chartered in 1848 by a Galvestonian, Ebenezer Allen, to run north and east from Galveston through cotton, sugar and timber country. The plan was opposed and openly ridiculed in Galveston, and Houston merchant Paul Bremond eventually purchased the charter.

A similar story can be told for the Texas and New Orleans Railroad, which ran east from Houston to Beaumont and Port Arthur, with plans for connection to New Orleans. The original 1856 charter was for a railroad from Galveston to Beaumont, but by 1858 it had transformed itself into a Houston–New Orleans line.

The first railroad to reach the island was the Galveston, Houston and Henderson, chartered in 1853 with initial support from both Houston and Galveston. Both cities bought a token subscription of \$300,000 in capital stock in 1855, but the majority of the capital came from European and Galveston investors. Construction began on the mainland opposite the island and reached the outskirts of Houston in 1859. Initially, freight moving from Houston to the island was transferred by ferryboat, but in 1860 a 10,000foot trestle (the longest in the hemisphere at that time) connected the island and mainland.

The Houston depot for the Galveston, Houston and Henderson was to be located at the corner of Main and McKinney. But by the time the railroad arrived, the city fathers had rethought the value of a direct rail connection to the sea. Fearing that cotton would simply flow straight through Houston and on to Galveston without stopping, the City Council located the depot on the south side of Main Street, denving the railroad any link to the Texas and Houston Central Railway. During the Civil War the Galveston-Houston connection was imposed by military authorities, and it became permanent in 1865. However, historian David McComb cites this as the first overt action in the coming economic struggle between Houston and Galveston.5

Galveston's Wharf Company

Galveston Wharf and Cotton Compress Co. was founded in 1854. Its name was shortened to Galveston Wharf Co. in 1860. Commercial wharves had operated in Galveston since 1854, and a number of mercantile and trading firms operated private wharves. Led by Menard and other key investors in the Galveston City Co., Galveston Wharf Co. began buying and consolidating wharves under common management. By 1859, 10 wharves and their associated warehouses and terminal facilities had fallen under control of the wharf company, giving it a monopoly over the state's most important export facilities.

In 1867, the city sued the wharf company over street access to the wharves, having already lost a previous battle over public versus private ownership of the waterfront itself. The resulting settlement merged all the docks and relevant waterfront facilities, including streets, into the wharf company. In exchange for tightening the company's monopoly grip, Galveston received undivided one-third ownership of the docks and a nonvoting voice on the company's board of owners and directors.

In 1869, brothers John and George Sealy, George Ball and John H. Hutchings purchased the one railroad serving Galveston, the Galveston, Houston and Henderson. All of these men were major investors in the Galveston Wharf Co., and in 1870 they received permission from the Texas Legislature to integrate the railroad into Galveston's wharves and terminals. The result was once more to tighten the company's control of local export facilities.

The extent of Galveston Wharf Co.'s misdeeds remains a matter of historical debate,⁶ but there is no question that it earned a statewide reputation for excessive charges, quarantine fees and a cavalier attitude toward customers. It was an irritant to cotton farmers, cotton

shippers and steamship lines. The Texas Grange singled out Galveston Wharf Co. (along with the Houston and Texas Central Railway) for special wrath among those institutions it saw as systematically robbing the state's farmers. At home, Willard Richardson of the Galveston *News* was an outspoken opponent, labeling Galveston Wharf Co. the "octopus of the Gulf."

Controlling the wharves was critical because Galveston was the best single outlet for cotton and other goods for Texas, Oklahoma and Kansas. After the Civil War, the cotton trade resumed its normal pattern, with Houston and Galveston serving as the chief outlet. As the rail network spread north to the Blackland Prairie and increased access to agricultural trade, the importance of Houston and Galveston multiplied. It would not be until 1873 that the Houston and Texas Central would connect with the Missouri, Kansas and Texas near the Oklahoma border and open up markets such as Chicago and St. Louis for Texas cotton. Until that time, all trade funneled south through Galveston, and Galveston Wharf Co. levied a toll for virtually every bale, barrel or crate that left the state. The Grange, for example, claimed that while dray charges to move a bale of cotton from rail to outbound steamer were only 15 cents, the wharf company collected 40 cents per bale and pocketed the difference.

Competing with Galveston

With Houston increasingly secure in its control of the railways, the competition between Houston and Galveston moved to the waterways. Galveston Wharf Co. became a catalyst for rivalry. The perception of high and unreasonable charges provoked efforts to get around the Galveston docks, and Buffalo Bayou seemed to offer an alternative path to the sea.

Navigation on Buffalo Bayou had always been important to Houston. Buffalo Bayou Co. was formed in 1839. It collected \$200 from local merchants and contracted to have five miles of Buffalo Bayou cleared of dangerous snags and debris. The first local docks were built in 1840 upon authorization by the state legislature. In June 1842, a city ordinance established the Port of Houston, authorizing it to control wharves and landings along Buffalo Bayou, collect wharf fees and invest in navigation improvements. Throughout the Civil War, only small, shallow-draft vessels could navigate Buffalo Bayou.

Meanwhile, Galveston faced navigation problems of its own. To say that it was home to the finest harbor between New Orleans and Vera Cruz did not mean it was immune to the shifting channels and shallow sandbars of all Gulf ports. The 27-mile-long island parallels the Texas coast, with the harbor between the island and the coast. A sandbar lay across the harbor entrance just below the water's surface. In 1837, the sandbar had a depth of 12 feet, but shoaling had caused it to grow, and by 1869 the harbor depth was reduced to only 8 feet.

The presence of the sandbar meant that no sizable ship could enter the port, particularly the deep-draft sailing ships of the day. Early innovators in Texas shipping, such as Charles Morgan, had begun to use shallow-draft steamships to minimize the problems posed by sandbars, but with a clearance of only 8 feet even Morgan's specially designed ships had to wait for high tide to cross the bar. Ships that could not enter the harbor had to unload their cargo into shallowdraft barges or smaller ships to be carried ashore, a process called "lightering" that was common to the Gulf Coast.

In the 1850s, as the wharf company's reputation spread and as cooperation between Houston and Galveston deteriorated, Houston shipping interests had the simple idea of bypassing Galveston altogether. If cargo had to be moved to smaller vessels anyway, why not bring the barges or boats directly up Buffalo Bayou, where rail connections were better? Traffic on Buffalo Bayou in the 1850s was largely monopolized by Houston and Galveston Navigation Co., and in the late 1850s the company began soliciting shippers to anchor in the channel outside the harbor and bring cargo directly to Houston.

After the Civil War, the economic battle between Houston and Galveston resumed in earnest. Houston and Galveston Navigation Co. failed to survive the war. It was replaced in 1866 by Houston Direct Navigation Co. Privately owned but actively promoted by Houston authorities, the new company was specifically chartered to promote trade on the bayou by avoiding wharf charges at Galveston. The company prospered. In 1869, it reported carrying 11,544 passengers and 815,466 barrels of freight. By 1872, the company operated four steamers, 18 barges and three tugs.7 Galveston Wharf Co. retaliated by levying a surcharge on any ship that lightered in the channel to deliver goods to Houston and then sought a return cargo out of Galveston Harbor.

Infrastructure Improvements

The next stage of the economic battle involved infrastructure improvements. Deepening Galveston's harbor would stop Houston's poaching of freight in midchannel, and deepening and widening Buffalo Bayou could offer shippers deepwater access to the state's rail center. Both sides sought the advantage.

Following the Civil War, Galveston established a board of harbor improvements, raised \$15,000 through a bond issue and adopted a plan to deepen the channel across the sandbar. This was done by sinking cedar pilings below water level, using the pilings to direct the current in such a way that it scoured out the sandbar and deepened the channel. After several stops and starts and with help from the federal government, the technique returned the bar to its earlier 12-foot depth by 1873.

In 1869, Houston organized Buffalo Bayou Ship Channel Co. to make the ship channel a reality. Supported partly with initial public funding and partly by wharfage and tonnage taxes, the company sought to create a 9-foot-deep channel from Houston to the Gulf of Mexico. In 1870, Congress was persuaded to make Houston a port of entry, and the Army Corps of Engineers conducted a survey of ship channel possibilities. The Corps concluded that a 6-foot-deep, 100-foot-wide channel was possible but that improvements above Harrisburg would be difficult. Both the ship channel company and the

Corps were making slow progress when outside events intervened.

Through its manipulation of facilities and rates, Galveston Wharf Co. had alienated the dominant shipper in the Gulf of Mexico by placing his ships at a competitive disadvantage. Charles Morgan and his Morgan Lines turned to Houston to make a major investment—building Houston's first ship channel at his own expense.⁸

The wharf company had apparently angered Morgan and damaged his business in several ways. Morgan had opened Galveston–New Orleans shipping in 1837 and virtually monopolized Gulf routes prior to the Civil War, pioneering the use of shallow hulls, holding postal contracts and offering a high level of service. He was a good customer of both Galveston Wharf Co. and Houston Direct Navigation Co.

Around 1870, the wharf company sought to reduce its dependence on trade with New Orleans and to enhance trade with New York, specifically with the Mallory steamship line. The owner, Charles H. Mallory, agreed to build four shallowhulled steamers to serve Galveston and to arrange direct and through rates with the Galveston, Houston and Henderson Railroad. Ball, Hutchings and John Sealy agreed to put up one-fourth of the capital for the four new Mallory ships.

By late 1870, Morgan's relationship with the wharf company was deteriorating rapidly. He found his ships subject to yellow fever quarantines and sent for long stays at the quarantine station in Galveston, where a heavy tax was levied. In 1873, Morgan successfully sued to have the tax removed

but could not stop the arbitrary quarantines. In 1874, long-term rebates offered to Morgan by the wharf company expired and were not renewed, placing him at a rate disadvantage relative to Mallory Lines.

In July 1874, Morgan joined forces with Houston. He purchased the assets and improvements of both Houston Direct Navigation Co. and Buffalo Bayou Ship Channel Co. By mid-1875, eight dredges were working around the clock, and in April 1876, a 9-foot channel was complete as far as Clinton, where Morgan established a terminal. The first ship to dock at Clinton was a Morgan ship loaded with railroad construction supplies, and Morgan immediately built a seven-mile spur to connect his Clinton terminal to the Houston and Texas Central Railroad. Morgan assumed control of the Houston and Texas Central in 1877; he had bypassed Galveston and was again in control of his own destiny.

Galveston then raised its sights to clearing a channel 20 or more feet deep. New Orleans had succeeded in opening a channel more than 26 feet deep, the standard of the day for a first-class port, by building jetties to concentrate the current and scour away sand barriers. The Army Corps of Engineers undertook similar projects in Galveston in both 1874 and 1880, aiming to achieve a 25-foot-deep channel, but both endeavors failed. Finally, in 1890, Congress authorized \$6.2 million to do the job right. The funds were appropriated to build five miles of protective granite and sandstone jetties and clear a 22-foot channel. In October 1896, the British steamer Algoa, the largest in the world and drawing 21 feet, docked at Galveston. The days of lightering in open water were over for ships with Galveston cargoes.

Meanwhile, Houston had fallen behind again. Morgan died in 1878, and Southern Pacific Co. absorbed most of his rail and steamship holdings by 1885. The Clinton terminal was abandoned in 1880 when a railroad was finally completed and opened between Houston and New Orleans. Barge traffic continued along Buffalo Bayou, but under a monopoly toll levied by Morgan's heirs, and the waterway slowly became less important. In 1892, after lengthy negotiations, the federal government bought Morgan's improvements to Buffalo Bayou. Efforts to upgrade the channel to a 25-foot depth were promoted by Houston, but the Corps of Engineers, which argued that recent investments in the nearby Galveston Harbor were sufficient for the region, opposed extensive improvements. Efforts to appeal directly to Congress were blocked by the chair of the strategic Harbors and Rivers Committee.

Railroads Again

In retrospect, the best longterm strategy for Galveston might have been to build a network of north-south rail connections, such as that proposed by the Galveston plan, to facilitate rail access to the docks from the largest region possible. The connection of the Texas and Houston Central to the Missouri, Kansas and Texas in 1873 marked the opening of Texas markets to the rest of the United States via rail. Suddenly Chicago and St. Louis were Galveston's competitors, where there had been none before. It

took most of the remainder of the decade for Texas railroads to convert their track to standard gauge. Among the last to convert—in 1879—was the Houston, Galveston and Henderson. Because rates and profits were higher for short hauls and with cars interchanged among railroads, Galveston Wharf Co. resisted the idea of a railcar rolling from anywhere in the United States straight onto Galveston docks.

A second rail line out of Galveston was finally begun in 1873, but the railroad was bankrupt by 1875. George Sealy, again joining with Hutchings, Ball and other Galveston investors, purchased the Gulf, Colorado and Santa Fe Railway. By 1881 they had completed a railroad that bypassed Houston, passing through Brenham, Waco and Fort Worth. The popular version of the motive for the railroad is that it was built to get around periodic yellow fever quarantines imposed by Houston, which were almost always put in force at the peak of cotton-marketing season to prevent cotton from flowing to Galveston without stopping in Houston. In fact, it was recognition—perhaps belated—that to be successful in a national rail network, Galveston needed direct rail access into the Brazos Valley and the Blackland Prairie cotton-growing regions.

A significant rail controversy raged between the two cities for more than 40 years over the Houston–Galveston differential, the difference in the rail tariff paid for shipping to one city versus the other. Railroad companies in the late 19th century set the rate for a bale of cotton shipped to Galveston as the rate to Houston plus 7 cents; the 7 cents was the

charge to transfer a bale from rail to channel steamer in Houston and ship it to Galveston. This meant the shipper was neutral between a Houston and Galveston market, but Galveston saw it as unfair because the 7 cents was well above the marginal cost of the last 50 miles by rail into Galveston. Further, in the minds of Galveston supporters was the nagging issue of how the rate would benefit Houston if the city achieved deepwater access. The Texas Railroad Commission supported the tariff in 1894, but complaints, hearings and court battles dragged on until 1933, when the differential was eliminated. The Houston-Galveston Equalization Agreement finally ended the controversy by equalizing the rates between the two cities on export and import items, plus rates on most coastal traffic.

The Hurricane and After

By 1900, Galveston held a clear edge in port facilities but found itself at the terminus of a poorly developed rail network. Houston was the regional rail hub but could not demonstrate the logic of a second port only 50 miles from Galveston. The hurricane of 1900, however, dramatically demonstrated Galveston's vulnerability to storms. With 6,000 dead and 3,600 homes lost, the great storm of September 1900 still ranks as the greatest natural disaster in U.S. history.

Houston Congressman Thomas H. Ball had proposed an 18-foot channel for Buffalo Bayou in 1896, but the Army Corps of Engineers, which had just finished its work on the Galveston jetties, opposed the legislation and it failed. In 1902, after the storm, opposition

Table 1
Distribution of Occupations in Texas Cities, 1910

	Dallas	Galveston	Houston	San Antonio
Agriculture	.8	1.3	1.1	2.4
Mining	.1	0	.2	.3
Manufacturing	26.8	22.5	27.0	28.1
Transportation	8.3	21.9	12.1	9.6
Trade	21.6	13.3	16.7	18.5
Public service	1.7	2.8	1.6	5.0
Personal service	23.0	22.6	25.7	22.5
Clerical	11.0	10.1	9.6	6.8

SOURCE: Census of Population, 1910.

evaporated, and Congress allocated \$1 million for a ship channel with a turning basin at Long Reach, four miles from downtown. In 1914, the channel would be dredged to 25 feet, allowing Houston to fully engage in Gulf trade.

Galveston responded positively to the storm in a number of ways. It reopened its wharves only two weeks after the storm, built a 17-foot seawall and raised the island's elevation to reduce future flooding. However, at a time when the rest of the state was poised to develop a significant manufacturing base, Galveston's reputation for storms and flooding deterred investors. In 1900, investment in Galveston manufacturing (\$6.1 million) was not much different from that of Houston (\$7 million), Dallas (\$6.9 million) and San Antonio (\$4.5 million). But Galveston would never compete successfully with these cities again.9

Table 1 shows the distribution of occupations in Galveston and other Texas cities in 1910, a decade after the storm. The two figures that stand out for Galveston are its weakness in manufacturing and its dependence on transportation. Moreover, its strength in transportation was under attack by this time, and not just by Houston. In 1904, nearby Texas City opened its own deepwater facilities, and subsequent legis-

lation would allow all Texas cities to create navigation districts, with voter approval, for the improvement of rivers, bays, streams and other waterways. By 1937, Orange, Beaumont, Port Neches, Corpus Christi, Port Isabel and Brownsville all had 25- to 30-foot channels, compared with 34 feet at Houston and Galveston. Galveston's one-time monopoly on Gulf shipping was gone.

For Houston, in contrast, oil would bring manufacturing, and the combination of railroads and deep water would make Houston Texas' leading port. Houston would become the dominant city in the Southwest in the 1930 census and hold that position for the rest of the 20th century. Its rival through the century would be not Galveston, but Dallas.

Notes

- ¹ For a more detailed discussion of the importance of river transportation before the arrival of the railroads, see Part 1 of this series of three articles, "Houston in 1900: Part 1. The Rise of the Regional City," Federal Reserve Bank of Dallas *Houston Business*, June 2002.
- ² David G. McComb, *Galveston: A History* (Austin: University of Texas Press, 1986), p. 47.
- General background on the controversy over the orientation of Texas railroads can be found in Kenneth W. Wheeler, *To Wear a City's Crown: The Beginnings of Urban Growth in Texas*, 1836–1865 (Cambridge: Harvard University Press, 1968), pp. 93–96, and Randolph B. Campbell, "Antebellum

- Texas," *The Handbook of Texas Online* (Austin: Texas State Historical Association, 2002), www.tsha.utexas.edu/handbook/online.
- ⁴ Richard G. Boehm, Exporting Cotton in Texas: Relationships of Ports and Inland Supply Points (Austin: University of Texas Bureau of Economic Research, 1975), p. 12.
- ⁵ McComb, p. 51.
- Galveston Wharf Co. exhibited monopolistic behavior in reported fees, rebates and constraints on rail capacity. The extent of the monopolistic abuses is presented differently by different authors. Wheeler (pp. 87-88) and James P. Baughman, in Charles Morgan and the Development of Southern Transportation (Nashville: Vanderbilt University Press, 1968, pp. 193–195) paint a negative picture, while a lesser pattern of abuses is offered by McComb (p. 56), Edward Coyle Sealy, in "Galveston Wharves," The Handbook of Texas Online (2002), and Harold M. Hyman, in Oleander Odyssey: The Kempners of Galveston, Texas, 1854-1880s (College Station: Texas A&M University Press, 1990, pp. 45–46).
- 7 "Houston Direct Navigation Co.," The Handbook of Texas Online (2002), and Marilyn McAdams Sibley, The Port of Houston: A History (Austin: University of Texas Press, 1968), p. 89.
- 8 See Baughman (pp. 191–200) for more details on the circumstances of Morgan's decision to ally himself with Houston.
- ⁹ Census of Manufactures, 1899.

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he pattern of no job growth continues in Houston, much as it does in the rest of the state and nation. The period of flat employment now stretches back over 18 months. The unemployment rate was 5.9 percent in September, and it has held steady near 6 percent since July. After four months showing moderate growth, the Houston Purchasing Managers Index turned weaker, indicating moderate contraction in September and October. The latest October reading is 49, just under the break-even point of 50.

Retail and Auto Sales

Retailers report that conditions improved in October but sales are still weak. October-to-October sales comparisons are much more favorable than those of August and September, although they are not nearly as strong as retailers would like. Colder weather seemed to work in favor of department stores, and strong home sales are helping furniture retailers.

Year-over-year auto sales are difficult to judge because of the effects last year of Tropical Storm Allison. However, they definitely weakened in October. October sales hit their lowest level locally since 1997, even though rebates and incentives remain in full force.

Real Estate

Home sales are similarly difficult to judge because both new and existing home sales in Houston were hit hard last year by the September 11 events. Not surprisingly, sales of both new and existing

homes were up sharply in September compared with last year. But more important, contacts report sales have been steady and strong over the last three months. Low interest rates continue to work their magic in keeping sales moving.

Office occupancy rates in Houston have been falling for four quarters, especially downtown. With roughly 1.5 million square feet coming back onto the market due to Enron. Arthur Andersen and the Chevron-Texaco merger, plus another 2 million square feet scheduled to be completed soon, the central business district faces continued hard times. However, the softness is not limited to downtown; the Galleria and Westchase areas have also registered negative absorption in recent months.

Energy Prices and Drilling

Crude oil prices have weakened in recent weeks, as OPEC overproduction and a deflated war premium pulled the price of West Texas Intermediate down to \$25 per barrel. Similarly, natural gas prices pulled back under \$4 per thousand cubic feet as gas inventories entered the storage season at record high levels.

Domestic drilling activity stayed near its 26-week average of 850 working rigs, and international drilling—led by stabilization of activity in Latin America and improvement in Europe—picked up a notch. Oil service and machinery companies express frustration over not seeing better drilling conditions with energy prices as strong as they have been recently. Major companies continue to steer a steady course in drilling, but independents seem reluctant to accelerate exploration activity—their normal pattern when prices are this high.

Petrochemicals and Refining

Petrochemical activity on the Ship Channel seems to have taken a page from the rest of the industrial sector. Demand slowed significantly over the summer. It has become difficult to pass through price increases, and prices of polyvinyl chloride and polyethylene actually fell in recent weeks. High feedstock prices have hurt profit margins.

Back-to-back hurricanes coming ashore from the Gulf limited production briefly and pulled down inventories of crude and oil products. Combined with very strong demand for gasoline, refiner profit margins have improved moderately in recent weeks. Gasoline demand, strong all year, has failed to put much upward pressure on pump prices because of high levels of imports, especially from Europe.



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