



**HOUSTON**  
2Q16 INDUSTRIAL MARKET

# HOUSTON INDUSTRIAL MARKET HAS MOMENTUM

Despite a wave of new supply, vacancy has remained low in Houston's industrial market due to healthy demand. Houston's vacancy rate has been at or below 5.6% since the first quarter of 2012. During this stretch, the overall asking rent has increased 21.0%, 612 industrial buildings have delivered a total of 41.6 million square feet, and the construction pipeline has averaged 89 buildings at 8.5 million square feet each quarter. Construction is trying to keep up with demand for warehouse and distribution properties, which is growing in response to changing trends in the retail sector.

Demand for storage space comes from expanding web-based retailers and also from store-based retailers that need to adjust their supply chains to support a growing share of web-based sales. The Houston Chronicle reports that Amazon plans to build an 855,000-square-foot warehouse in the 970-acre Pinto Business Park at the southwest corner of Interstate 45 North and Beltway 8. Amazon's proposed \$136 million facility, which would be separate from the company's Prime Now facility in Humble, could bring 1,000 jobs to the area and an economic impact of \$173.0 million annually.

Retailers accounted for the top five industrial deals in the Houston area, totaling over 1.3 million square feet in 2016. Those transactions made up almost 20% of overall leasing activity. Manufacturers, wholesalers and logistics companies continue to lease warehouse space as they evaluate their supply chains in light of the broad changes in demand.

### Industrial and Retail Real Estate Driven by Consumer Demands

The real driver of change is technology's influence on consumer behavior and its subsequent impact on retail and industrial real estate. The digital revolution has structurally shifted the way consumers research products, compare prices and ultimately make purchasing decisions. Indeed, the way retail and industrial space is used has also changed. With change comes opportunity, and meeting consumer expectations will be key to driving growth.

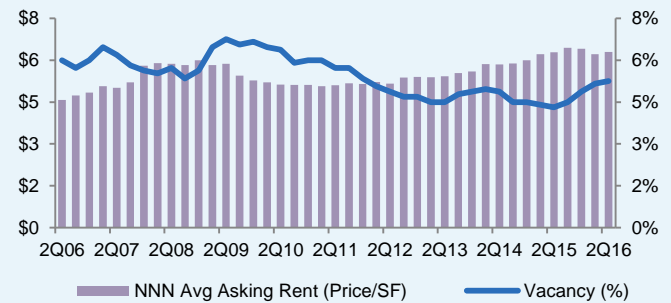
The increasing number of fulfillment and delivery options, including shifts in the once imperturbable grocery industry, has created ripple effects throughout the supply chain. Consumers can buy online and then ship to a store, their home or a third party. Manufacturers now sell directly to consumers, and online returns make up an unusually large percentage of sales. The use of online marketplaces, distribution and fulfillment centers, reverse logistics for store returns and true omnichannel commerce is influencing the what, where, when and how of industrial real estate.

### Current Conditions

- Vacancy overall has been at or below the current rate of 5.6% for 18 consecutive quarters.
- 73 projects representing 11.7 million SF of construction underway.
- 2.2 million SF in 18 buildings came online second quarter 2016.

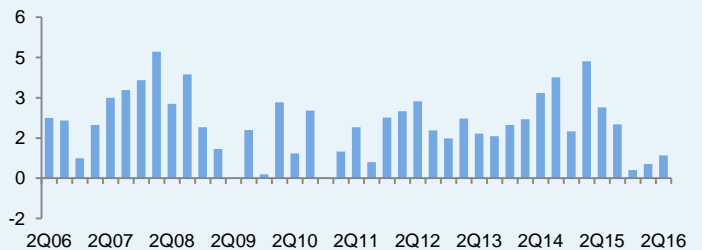
### Market Analysis

#### Asking Rent and Vacancy



#### Net Absorption

Square Feet, Millions



### Market Summary

	Current Quarter	Prior Quarter	Year Ago Period	12 Month Forecast
Total Inventory (SF)	523.1 M	517.6 M	511.5 M	↔
Vacancy Rate	5.6%	5.5%	4.5%	↑
Qtrly Net Absorption (SF)	847,452	530,300	2,729,327	↓
NNN Avg Asking Rent	\$6.71	\$6.63	\$6.70	↑
Under Construction (SF)	11,652,393	11,600,327	13,661,960	↓
Deliveries (SF)	2,248,643	2,409,997	1,958,693	↓



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In a recent edition of [Friday Market Insight](#), a Newmark Grubb Knight Frank publication, Houston ranked in the top 25% across 45 major industrial markets tracked by NGKF when measuring typical real estate gauges (vacancy, construction, absorption, rent and leasing activity) and two economic indicators (employment and population). The Momentum Index ranking shows the markets with the greatest drive are a mix of large markets (Dallas, Inland Empire, Atlanta, Chicago, Los Angeles and Houston), each with at least 500 million square feet of inventory, and smaller, high-growth markets (Nashville, Austin, Denver, Oakland/East Bay, Silicon Valley and Seattle).

**Vacancy**

Houston's industrial vacancy rate increased 30 basis points quarter-over-quarter, from 5.3% to 5.6%. Houston had 29.4 million square feet of vacant industrial space at the end of the second quarter. Among the major property types, manufacturing closed the quarter at 2.2% vacancy, and warehouse and distribution ended the first half of the year at 6.2%. The North submarket had the highest overall vacancy at 9.1%, an elevated supply of institutional warehouse and distribution space at 10.0% and manufacturing at 2.5%. The Northeast submarket came in with the lowest overall vacancy at 1.7%, with warehouse and distribution at 2.0% and manufacturing at 0.6%.

In response to higher vacancy, construction activity has shifted from the North and Northwest submarkets to the east side of Houston, which includes Baytown, the Port of Houston and the ship channel. This transition also stems from new refining and natural gas cracking under way on the east side. Expect construction activity to soon slow, due to a lack of available land along the ship channel, a first in Houston's history.

**Construction and Deliveries**

There is currently 11.7 million square feet under construction in the Houston industrial market, with approximately 44% pre-leased. Warehouse and distribution space is 7.4 million square feet, and manufacturing space is 4.3 million square feet.

Deliveries during the second quarter of 2016 totaled 2.2 million square feet in 18 buildings. Year-to-date deliveries are at approximately 5.5 million square feet in a total of 52 buildings that are 46.0% leased.

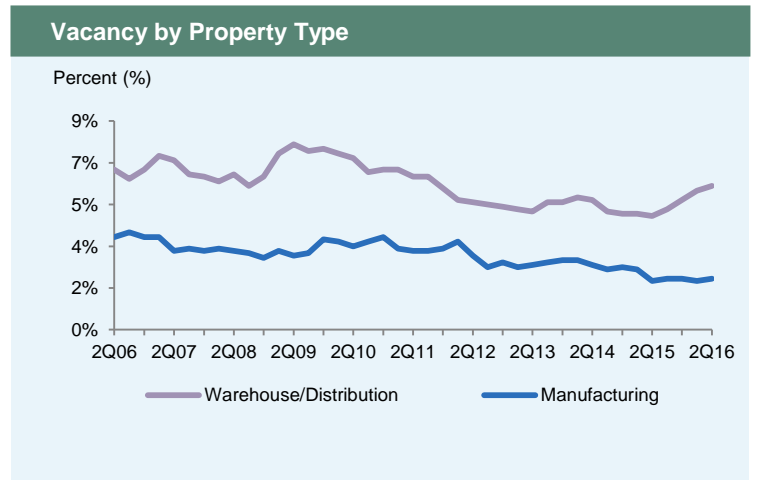
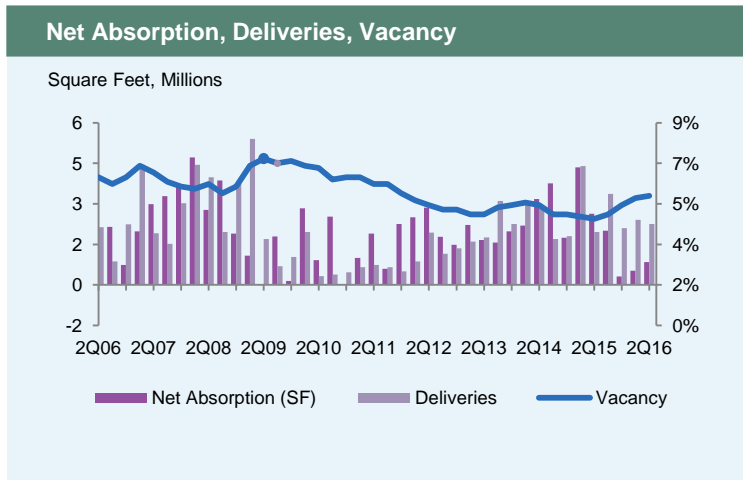
Daikin Industries, the world's largest manufacturer of heating, cooling and refrigerant products, is nearing completion on a massive 4.0 million-square-foot, \$417.0 million manufacturing and logistics campus on the northwest side of Houston that will employ at least 4,000 people. The building is the largest tilt-wall construction project in the world. Daikin announced that its new campus has officially been named the Daikin Texas Technology Park.

Bayport North Industrial Park is a new 41.5-acre industrial development near the Port of Houston in Pasadena. The project will be 738,610 square feet in total. Building 1 is 176,655 square feet, Building 2 is 369,755 square feet and Building 3 is 192,200 square feet. North Bayport Building 2 was built as a speculative structure that completed in December 2015, catching the eye of several petrochemical companies interested in leasing space. The building is near Bayport and Barbour's Cut terminals at the Port of Houston.

**Absorption and Leasing Activity**

Houston's industrial market posted 847,452 square feet of net absorption in second-quarter 2016, but new supply outpaced demand for the fourth consecutive quarter. The Southeast submarket contributed the largest share at 648,850 square feet, followed by the Southwest submarket with 504,312 square feet of net absorption. Two submarkets posted negative absorption: the Central Business District, with negative 475,207 square feet; and the North submarket, with negative 130,132 square feet.

There were several major tenant move-ins contributing to net absorption gains in the second quarter, including: Serta, with 268,482 square feet in Fallbrook Pines Business Park in the Highway 290/Tomball Parkway submarket; A1 Warehousing, with 154,114 square feet in Lockwood Distribution Center in the Downtown submarket; and Corporate Liquidators, with 46,400 square feet in Central Park in the CBD Northwest Inner Loop Submarket.





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### The Port of Houston Benefits the Houston Economy

The considerable amount of natural gas in the region and the Panama Canal expansion have stimulated the development of chemical companies in the Greater Houston area. There are approximately \$50 billion of chemical and plastics plants and oil refineries being built on the east side of town to take advantage of the cheap natural gas. The expansion of the canal, which is scheduled to open June 26, is expected to get these products exported faster and at less cost.

Metrostudy, a company that studies demographics, reported that Houston lost 17,000 energy jobs last year. Conversely, the Port of Houston Authority reported that The Houston Ship Channel-related business has increased by an additional 1.0 million jobs through the Texas Gulf Coast region since 2012.

With more than \$110 billion in exports, the Houston-Galveston Customs District ranked as the seventh busiest in the U.S. by dollar value in 2015, according to the Greater Houston Partnership. Additionally, the Greater Houston Port Bureau recently reported that in 2015, polyethylene plastics used for everyday items exceeded petroleum.

The \$525.0 billion widening of the Panama Canal is reported to be 97.0% complete, per the website Mi Canal de Panama.

As petrochemical construction is expected to wind down in mid-2017, oil prices need to stabilize for the rig count, while upstream energy employment needs to improve to offset construction losses. Even under the best circumstances, 2017 will be another slow year. Petrochemical projects continue to be announced, but it will be difficult to replace the current \$50.0 billion worth of developments underway.

Company	Location	Project	Completion	Value (\$ million)
Ineos	Brazoria	Proposed Ethylene	2020+	\$2,000 - \$4,000
Dow MEGlobal	Freeport	Monoethylene Glycol	2019	\$1,000
BASF	Freeport	Proposed Propylene	Unknown	\$1,000+
Fund Connell	Texas City	Proposed Methanol	Unknown	\$4,500
Air Products	Baytown	Hydrogen	2018	\$400
BASF	Pasadena	Plasticizers	2017	Unknown
Chevron Phillips	Baytown	PAO	2017	Unknown

Source: Bauer Institute for Regional Forecasting, various sources.

### Lease/User Transactions

Tenant	Building	Submarket	Type	Square Feet
Serta	Fallbrook Pines Business Center	Northwest	Direct/New	268,482
A1 Warehousing	1060 Lockwood Dr	Northwest	Direct/New	154,114
Smart Warehousing	8790 Wallisville Rd	Northeast	Direct/New	83,011
Corporate Liquidators	600-650 W 6 <sup>th</sup> St	CBD	Direct/Renewal	46,400
Evolucity Commerce	7350 Denny Rd	Northwest	Direct/Renewal	42,000

### Select Sales Transactions

Building	Submarket	Sale Price	Price/SF	Square Feet
9999 Veterans Memorial Dr	North	\$2,447,511	\$11.13	220,000
West Loop Business Park II	Northwest	\$7,181,076	\$85.09	84,392
West Loop Business Park I	Northwest	\$6,318,924	\$85.09	74,260
Exxon Mobile Brookhollow Campus	Northwest	\$482,937	\$8.04	60,094
12701-12703 Royal Dr	Southwest	\$1,500,000	\$47.54	31,552



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### Submarket Statistics

	Total Inventory (SF)	Total Vacant (SF)	Total Vacancy Rate	Qtr Absorption (SF)	YTD Absorption (SF)	Under Construction (SF)	Qtr Deliveries (SF)	Total NNN Asking Rent (Price/SF)
<b>Houston Market Total</b>	<b>523,102,307</b>	<b>29,128,232</b>	<b>5.6%</b>	<b>847,452</b>	<b>2,280,850</b>	<b>11,652,393</b>	<b>2,248,643</b>	<b>\$6.71</b>
Warehouse & Distribution	437,275,910	27,236,145	6.2%	697,407	1,727,309	7,370,518	1,996,643	\$6.65
Manufacturing	85,826,397	1,892,087	2.2%	150,045	553,541	4,281,875	252,000	\$7.30
<b>CBD Total</b>	<b>55,635,865</b>	<b>3,084,512</b>	<b>5.5%</b>	<b>-475,207</b>	<b>-679,854</b>	<b>0</b>	<b>0</b>	<b>\$4.76</b>
Warehouse & Distribution	45,290,132	2,898,609	6.4%	-453,507	-658,154	0	0	\$4.70
Manufacturing	10,345,733	185,903	1.8%	-21,700	-21,700	0	0	\$5.37
<b>North Total</b>	<b>90,014,697</b>	<b>8,059,774</b>	<b>9.1%</b>	<b>-130,132</b>	<b>328,183</b>	<b>724,025</b>	<b>970,696</b>	<b>\$7.25</b>
Warehouse & Distribution	77,380,760	7,743,192	10.0%	-252,505	14,610	472,150	824,696	\$7.20
Manufacturing	12,633,937	316,582	2.5%	122,373	313,573	251,875	146,000	\$7.71
<b>Northeast Total</b>	<b>33,740,114</b>	<b>584,295</b>	<b>1.7%</b>	<b>104,815</b>	<b>453,608</b>	<b>0</b>	<b>0</b>	<b>\$4.29</b>
Warehouse & Distribution	27,091,412	546,319	2.0%	56,315	350,884	0	0	\$4.48
Manufacturing	6,648,702	37,976	0.6%	48,500	102,724	0	0	\$2.57
<b>Northwest Total</b>	<b>146,733,804</b>	<b>8,889,119</b>	<b>6.1%</b>	<b>117,592</b>	<b>733,751</b>	<b>5,199,515</b>	<b>147,040</b>	<b>\$7.05</b>
Warehouse & Distribution	126,702,749	8,395,018	6.6%	145,886	678,417	1,299,515	147,040	\$7.10
Manufacturing	20,031,055	494,101	2.4%	-28,294	55,334	3,900,000	0	\$7.16
<b>Southeast Total</b>	<b>84,285,812</b>	<b>3,831,300</b>	<b>4.6%</b>	<b>648,850</b>	<b>379,955</b>	<b>3,428,586</b>	<b>695,052</b>	<b>\$6.80</b>
Warehouse & Distribution	67,116,733	3,477,909	5.2%	665,650	390,943	3,298,586	695,052	\$6.72
Manufacturing	17,169,079	353,391	2.1%	19,200	-10,988	130,000	0	\$7.92
<b>South Total</b>	<b>45,360,358</b>	<b>1,510,076</b>	<b>3.3%</b>	<b>35,472</b>	<b>-114,049</b>	<b>382,800</b>	<b>26,520</b>	<b>\$5.83</b>
Warehouse & Distribution	36,023,398	1,417,454	3.9%	35,472	-114,049	382,800	26,520	\$5.74
Manufacturing	9,336,960	92,622	1.0%	0	0	0	0	\$6.12
<b>Southwest Total</b>	<b>67,331,657</b>	<b>3,174,906</b>	<b>4.7%</b>	<b>504,312</b>	<b>1,173,506</b>	<b>1,917,467</b>	<b>409,335</b>	<b>\$7.47</b>
Warehouse & Distribution	57,670,726	2,763,394	4.8%	494,346	1,058,908	1,917,467	303,335	\$7.08
Manufacturing	9,660,931	411,512	4.3%	9,966	114,598	0	106,000	\$9.41



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**Texas Development Activity**

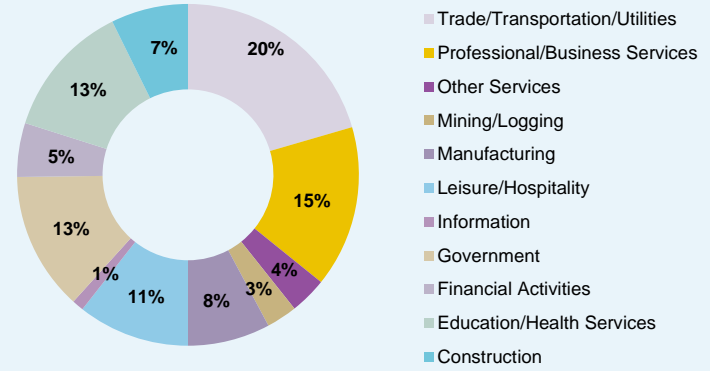
Top 10 Submarkets by Square Feet

Rank	Submarket	Under Construction (SF)
1	Great SW/Arlington Dallas	6,442,222
2	Northwest Houston	5,199,515
3	South Dallas	5,182,699
4	North Fort Worth	4,849,102
5	Southeast Houston	3,428,586
6	Southwest Houston	1,917,467
7	Northwest Dallas	1,889,402
8	Northeast Dallas	1,298,021
9	DFW Airport	975,534
10	Hays County Austin	865,000

Source: NGKF Research 2Q16

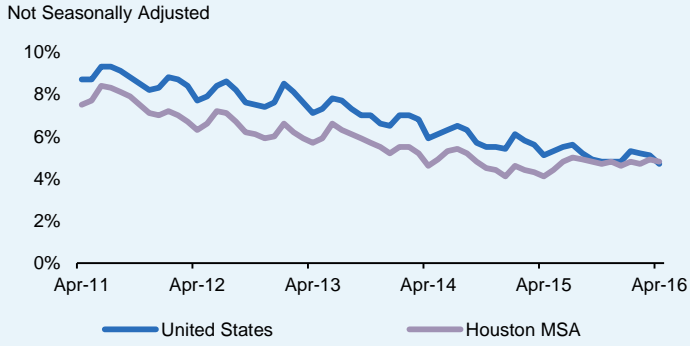
**Employment By Industry**

Houston, April 2016



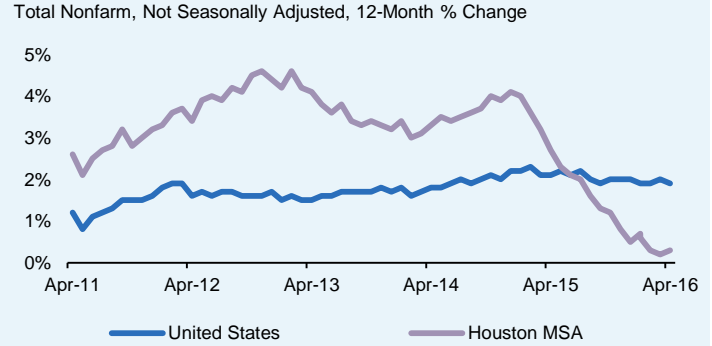
Source: U. S. Bureau of Labor Statistics

**Unemployment Rate**



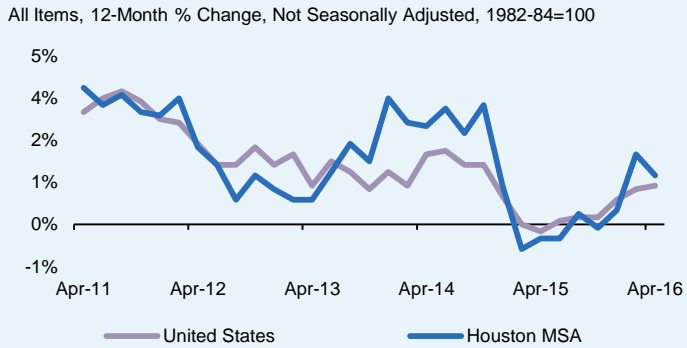
Source: U.S. Bureau of Labor Statistics,

**Payroll Employment**



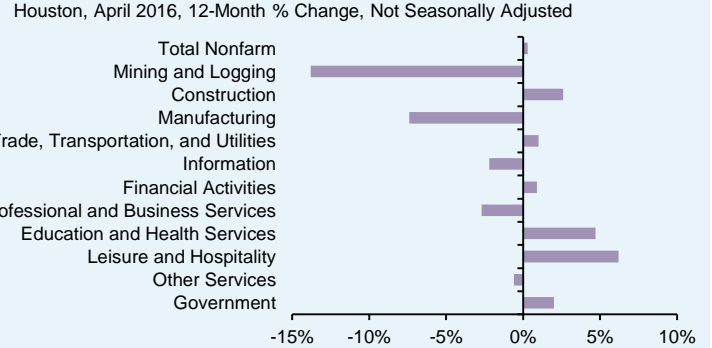
Source: U.S. Bureau of Labor Statistics,

**Consumer Price Index (CPI)**



Source: U.S. Bureau of Labor Statistics

**Employment Growth by Industry**



Source: U.S. Bureau of Labor Statistics



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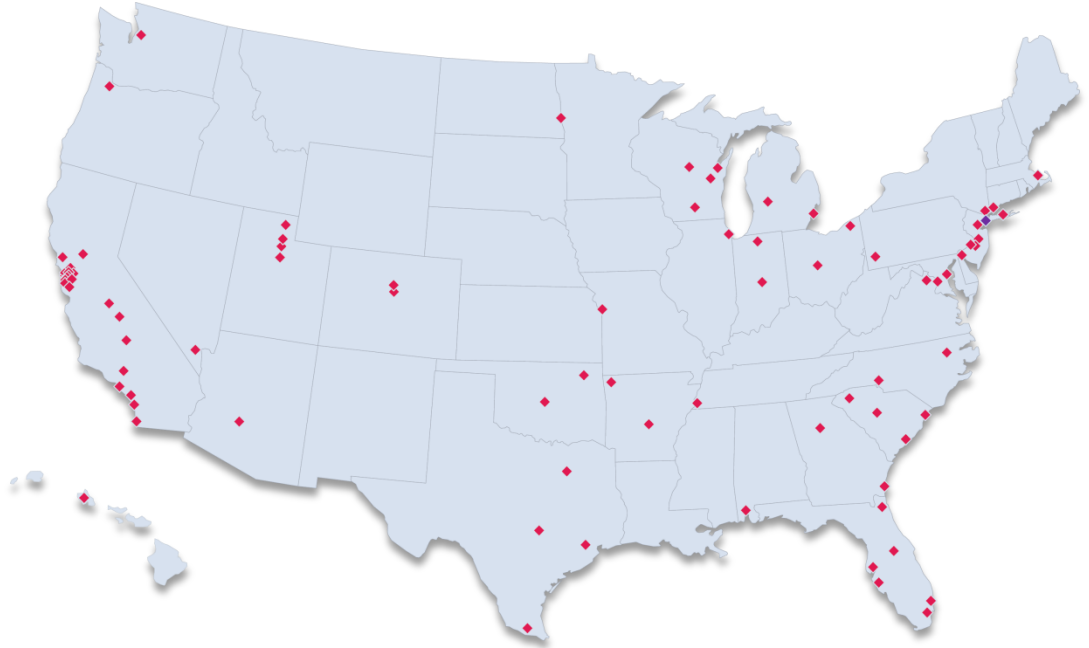
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