TEN-X COMMERCIAL

× RETAIL MARKET OUTLOOK

FALL 2017

TABLE OF CONTENTS

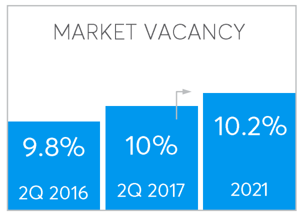
× US RETAIL MARKETS

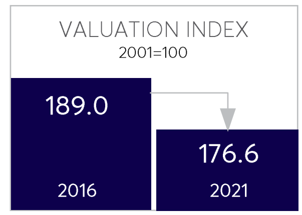
RETAIL REMAINS SLUGGISH AS E-COMMERCE WEIGHS ON FUNDAMENTALS

RETAIL ABSORPTION AT CYCLE BOTTOM OF 420,000 SF IN SECOND QUARTER

RETAIL **CAP RATES ARE UP 40 BPS FROM THEIR YEAR-AGO LOW,** AT **6.2%** IN THE SECOND QUARTER

DEAL VOLUME SLID TO 4-YEAR LOW OF **$14.6 BILLION** IN THE SECOND QUARTER OF 2017





RENTS SURPASSED $18 PSF FOR THE FIRST TIME ON EFFECTIVE ANNUAL RENT GROWTH OF **1.8%** IN THE SECOND QUARTER

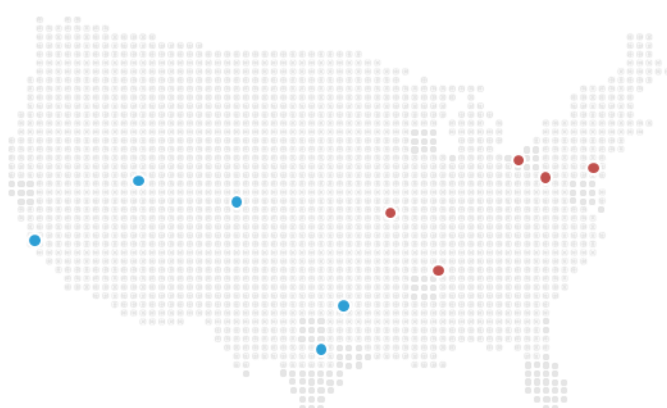
TEN-X RESEARCH AVERAGE RANK OF RETAIL METROS

4.7

RANKING SCALE

6 CONTRACTION — **1** STRONG GROWTH

Rankings incorporate analysis of current and recent market conditions (vacancies, rent growth, construction activity, and absorption) with our forward view of these measures.



TOP 5 BUY MARKETS
- Austin, TX
- Denver, CO
- Dallas, TX
- Salt Lake City, UT
- San Jose, CA

TOP 5 SELL MARKETS
- Kansas City, MO
- Memphis, TN
- Cleveland, OH
- Northern NJ
- Pittsburgh, PA

Sources: BLS, Real Capital Analytics http://www.rcanalytics.com, Reis, RERC, Ten-X Research forecasts

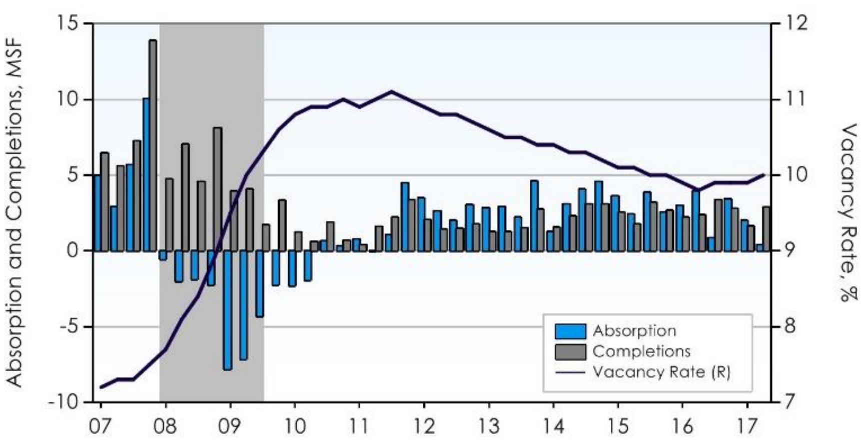
× SHOPPING FROM THE COMFORT OF HOME

The US retail recovery, which has been agonizingly slow this cycle, hit a low water mark in the second quarter of 2017. Net absorption totaled a meager 420,000 square feet, the lowest quarterly total this cycle. Vacancies ticked up 10 bps from the prior quarter to 10%, and are 20 bps higher than a year ago. This non-recovery speaks to the extremely formidable nature of the secular challenges and risks the traditional retail sector faces. Online retail continues to grow unabated and accumulate market share in an increasing array of retail sub-classes.

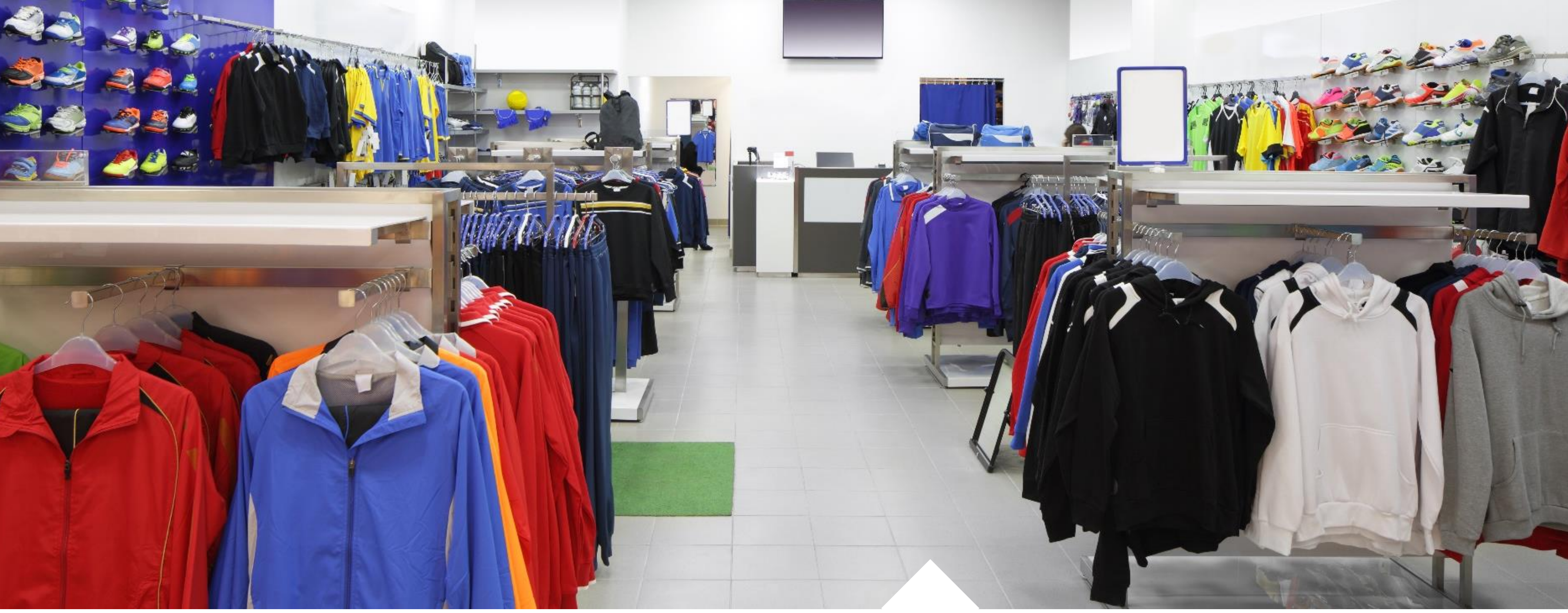
Amazon's acquisition of Whole Foods was the single biggest retail-centric story of the second quarter, and the behemoth's clear commitment to invading the grocery space is indicative of the broader trend of technology companies and non-traditional retailers disrupting traditional brick-and-mortar retail.

So far, the best-performing retail markets are enjoying the strongest economic and demographic growth. Higher incomes and more shoppers are serving as a bulwark against the shift to e-commerce, for now.

RETAIL VACANCIES DRIFT UP TO 10% AS ABSORPTION DETERIORATES



Sources: Reis, Ten-X Research



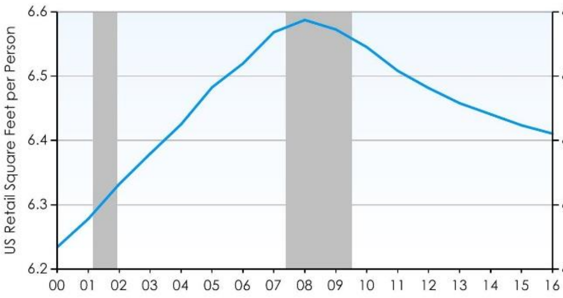
It cannot be understated how big an impediment the technological shift towards e-commerce has been to retail fundamentals this cycle. E-commerce now comprises 14.4% of total retail sales, compared to less than 10% just five years ago. This has led to the warehouse/distribution space being the primary beneficiary of the consumer recovery and expansion this cycle as more sales are fulfilled from warehouses.

Retail footprint per person continued its long-running decline in 2016, a trend likely to continue for the foreseeable future as retailers face lower in-store inventory needs amid fewer shoppers. These headwinds are set to remain in place for years to come, suggesting limited upside for retail fundamentals.

E-RETAIL SURGES TO 14.4% OF TOTAL RETAIL SALES

Sources: US Census Bureau, Ten-X Research

RETAIL FOOTPRINT PER PERSON SHRANK AGAIN IN 2016



Sources: US Census Bureau, Ten-X Research

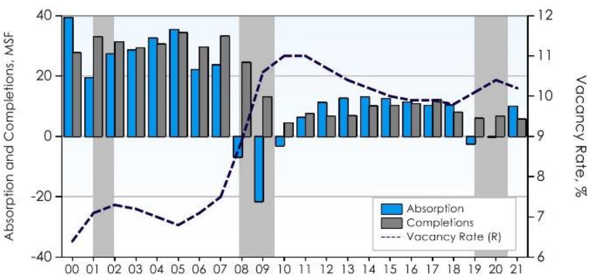
× VACANCY AND RENT ANALYSIS

Retail absorption is forecast to bounce back modestly and outstrip completions in the second half of 2017 and in 2018, pulling vacancies to a cycle low of 9.8% by yearend 2018. This will leave availability just 120 bps lower than its 2011 cyclical peak, reflecting the failure of absorption to accelerate at all this cycle.

Looking to our 2019-2020 model years, which stress test fundamentals under recessionary conditions, the picture becomes bleaker. Annual completions of 6.4 msf will easily swamp negative absorption in each year of the stress test, resulting in vacancies jumping up to 10.4% by the end of 2020.

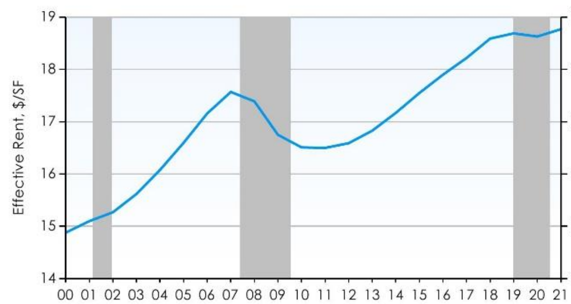
We reintroduce economic growth in our newly added 2021 forecast year, which offers some improvement. Positive net absorption would return and outstrip completions, driving vacancies down 20 bps to 10.2% by the end of the forecast.

RETAIL VACANCIES WILL MAKE MINIMAL IMPROVEMENT THROUGH 2018 BEFORE JUMPING TO 10.4% BY 2020



Sources: Reis, Ten-X Research Forecasts

EFFECTIVE RENTS WILL SEE WEAK, INCONSISTENT GROWTH THROUGH 2021

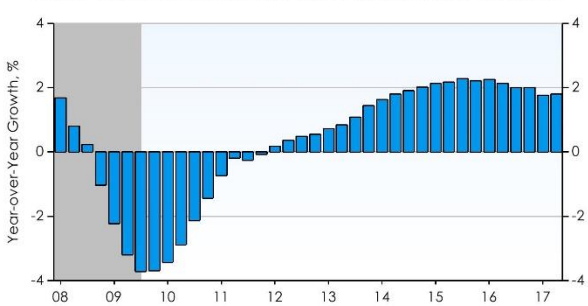


Sources: Reis, Ten-X Research Forecasts

Effective rents are at all-time highs and continue to see stable growth despite the lack of vacancy improvement. Effective rents grew 0.5% in the second quarter and are 1.8% higher than a year ago, identical to their growth rate a quarter ago.

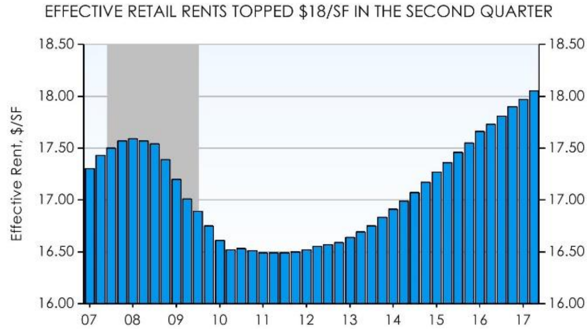
We expect 1.9% annual growth through 2018 followed by stagnancy in 2019-20, and a 0.8% gain in 2021.

GROWTH HELD CONSTANT AT 1.8% IN THE SECOND QUARTER



Sources: Reis, Ten-X Research

EFFECTIVE RETAIL RENTS TOPPED $18/SF IN THE SECOND QUARTER



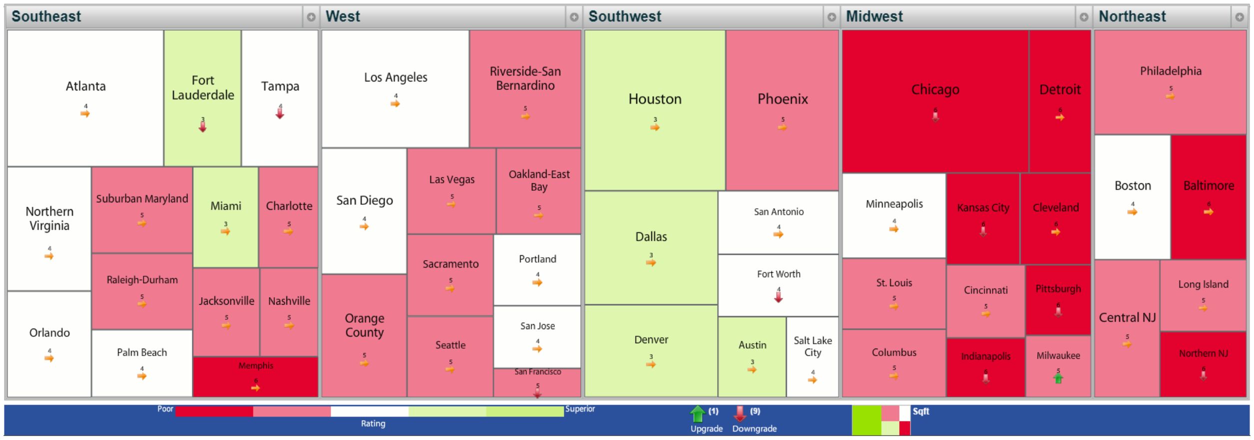
Sources: Reis, Ten-X Research

× RETAIL SECTOR HEAT MAP

The retail sector aggregate score fell to 4.65 this quarter, from 4.49 a quarter ago. 9 markets were downgraded while only 1 market saw an improvement to its score. Retail remains under extreme pressure from e-retail, as stores announce bankruptcies, store closures, and reduced footprints.

Regions and markets with strong economic and demographic situations tend be the best-performing with the most favorable outlooks. Stronger job and wage prospects plus increasing counts of shoppers are helping these areas beat back the overarching forces working against retail. The Southwest and Southeast are the regions with the best outlooks, owing to these factors, while the struggling economies in the Midwest and constrained population growth and expensive rents of the Northeast are adversely affecting retailing conditions in those areas. The West is a mixed bag, as fundamentals are healthy in markets like San Francisco, but have little room left to appreciate further.

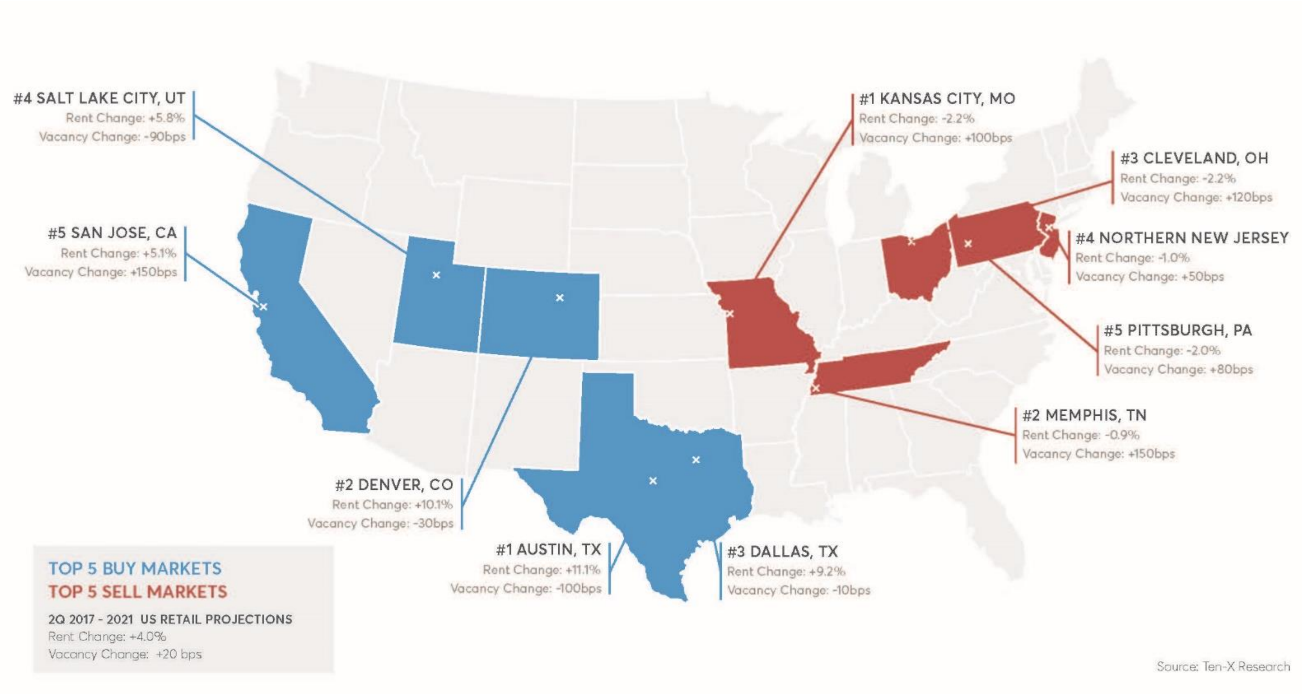
The Ten-X Research Retail Heatmap highlights regional and market-by-market dichotomies. The size of each market box represents each market's total retail square footage, while the combined size of each regional box represents the relative size of each region. The numerical rankings and colors represent the current and four-year projected strength of each market, with 1 and dark green signifying the strongest performers, and 6 and dark red denoting the weakest. The direction of the arrow in each box represents the direction each market is moving in.



Source: Ten-X Research

×TOP 5 RETAIL BUY AND SELL MARKETS

Ten-X Research chooses top buy and sell markets based on projected NOI growth, vacancy improvement, rent growth, and valuations as reflected in the Ten-X Research Long Term Forecast.



2Q 2017 - 2021 US RETAIL PROJECTIONS

Top 5 Buy Markets	2Q 2017 Rents ($ psf)	2021 Rents ($ psf)	Change in Rents (%)	2Q 2017 Vacancies (%)	2021 Vacancies (%)	Change in Vacancies (bps)
Austin, TX	21.05	23.38	11.1%	5.3	4.3	-100 bps
Denver, CO	16.42	18.08	10.1%	9.7	9.4	-30 bps
Dallas, TX	16.02	17.50	9.2%	11.7	11.6	-10 bps
Salt Lake City, UT	14.19	15.01	5.8%	12.5	11.6	-90 bps
San Jose, CA	31.52	33.12	5.1%	5.2	6.7	150 bps

Top 5 Sell Markets	2Q 2017 Rents ($ psf)	2021 Rents ($ psf)	Change in Rents (%)	2Q 2017 Vacancies (%)	2021 Vacancies (%)	Change in Vacancies (bps)
Kansas City, MO	12.57	12.30	-2.2%	11.2	12.2	100 bps
Memphis, TN	12.33	12.22	-0.9%	13.4	14.9	150 bps
Cleveland, OH	13.61	13.31	-2.2%	15.7	16.9	120 bps
Northern NJ	26.19	25.92	-1.0%	8.6	9.1	50 bps
Pittsburgh, PA	15.37	15.07	-2.0%	9.1	9.9	80 bps

US	18.05	18.77	4.0%	10.0	10.2	20 bps

× TOP BUY MARKETS

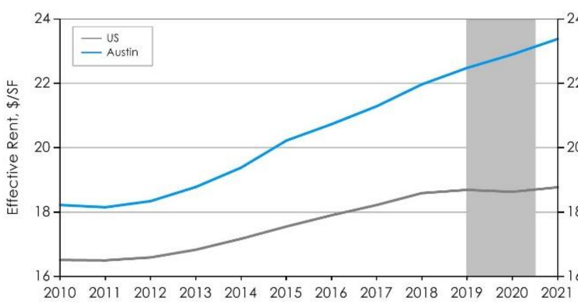
Investors considering purchasing retail properties should consider these markets.

#1 Austin

AUSTIN'S POPULATION IS EXPLODING

- Austin has seen the strongest population growth among large metro areas for six years running, including 2.9% growth in 2016.
- Metro job growth has been consistently strong this cycle, with year-ago gains currently trending in the mid-2% range.
- Education/healthcare is the primary engine of growth, with jobs up more than 5% year-over-year.
- Unemployment in Austin has seen a corresponding fall to a miniscule 2.9% on a seasonally adjusted basis, its lowest rate since 2000.

AUSTIN vs US EFFECTIVE RENTS

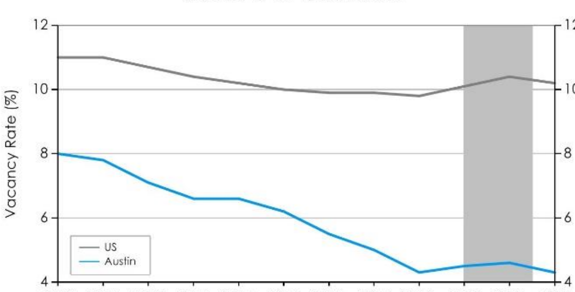


Sources: Reis, Ten-X Research Forecasts

RETAIL RENTS WILL KEEP RISING AS VACANCIES REMAIN LOW

- Though vacancies rose 10 bps in the second quarter to 5.3%, per Reis, availability is down from a year ago and remains very tight.
- Vacancies are set to decline to a low of 4.3% by 2018 and hang in the low-4% range through 2021.
- Effective rents are making consistent gains and have not declined since mid-2012. Growth is forecast to persist in the mid-2% range through 2021, even amid the 2019-20 stress test.
- NOI is projected to average solid 3.6% annual gains through 2018 before downshifting to the low-2% range from 2019-2021.

AUSTIN vs US VACANCIES



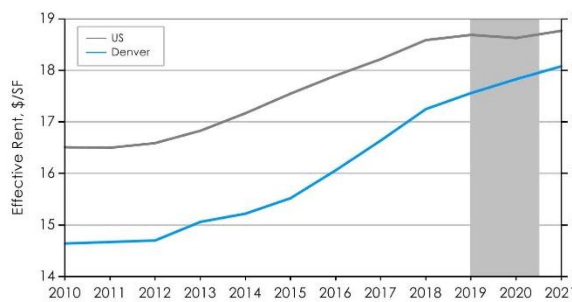
Sources: Reis, Ten-X Research Forecasts

#2 Denver

DENVER'S GROWTH IS 'ROCKY MOUNTAIN HIGH' THIS CYCLE

- Metro job growth has regularly topped 2% year-over-year throughout this cycle, sending total employment to a new all-time peak.
- Unemployment continues to tighten as jobs increase, with the jobless rate now down to the low-2% range.
- Denver continually attracts new residents at a rapid clip; its population grew 1.6% in 2016 and growth has far outstripped the US average for decades.

DENVER vs US EFFECTIVE RENTS

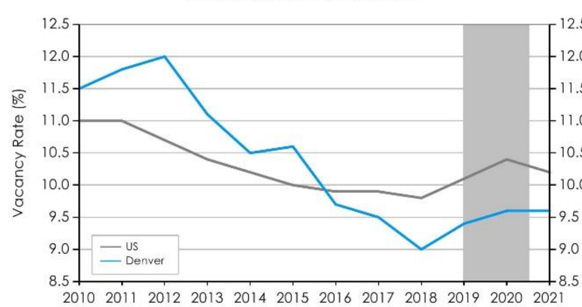


Sources: Reis, Ten-X Research Forecasts

NOI IS FORECAST TO CONTINUE GROWING, EVEN AMID 2019-20 STRESS TEST

- Denver retail vacancies, currently 9.7% according to Reis, are forecast to hit a low of 9% by 2018 before bouncing up around the mid-9% range through 2021.
- Despite only modest availability declines on the horizon, rent growth will be solid as effective rents top $20 psf by 2021.
- NOI growth of 4% per annum will prevail through 2018 as availability bottoms and rents grow in excess of 3% per year. More moderate NOI gains in the mid-1% range will then take hold from 2019-2021.

DENVER vs US VACANCIES



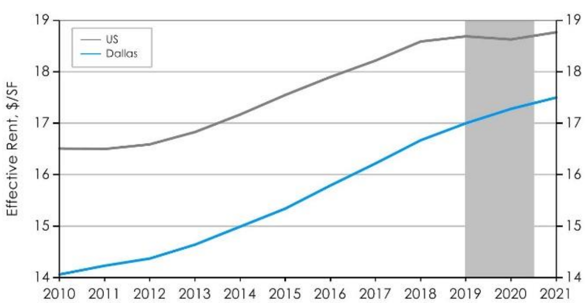
Sources: Reis, Ten-X Research Forecasts

#3 Dallas

DALLAS' ECONOMY IS THRIVING...

- Dallas' economy continues to enjoy healthy expansion, with annual job growth in excess of 3% and jobs at an all-time high.
- Professional/business services and financial services remain key growth drivers; both are growing between 3 and 5% year-over-year.
- Unemployment is down to the low-3% range, well below the US average. In addition, the metro's population grew a healthy 2.1% in 2016, which should cultivate strong future economic growth.

DALLAS vs US EFFECTIVE RENTS

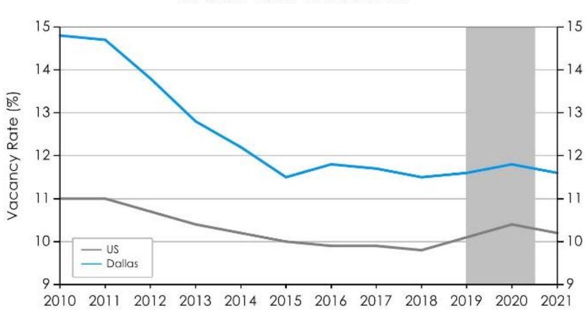


Sources: Reis, Ten-X Research Forecasts

...AND DEMAND FOR RETAIL SPACE REMAINS HOT

- Dallas retail net absorption has been positive for 12 straight quarters and vacancies have dropped 330 bps from their prior peak to 11.7%, per Reis.
- Effective rents are at an all-time peak far beyond the prior cycle, and are up 3.2% year-over-year.
- Vacancies will trough in the mid-11% range by 2018 and vacillate there through 2021, despite the stress test.
- Solid rent growth throughout the forecast will drive mid-3% annual NOI growth through 2018, before a lack of vacancy improvement in 2019-21 results in more subdued NOI gains in the mid-1% range.

DALLAS vs US VACANCIES



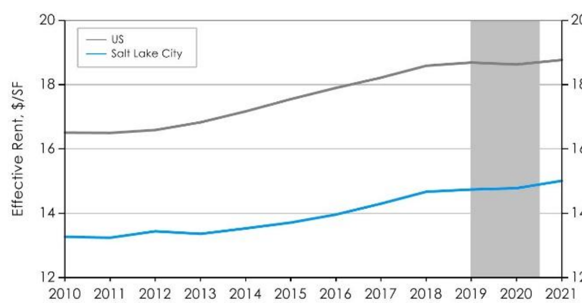
Sources: Reis, Ten-X Research Forecasts

#4 Salt Lake City

SALT LAKE CITY IS BENEFITTING FROM RAPID RETAIL HIRING

- Salt Lake City employment growth has been a model of consistency this cycle, with jobs up 2.4% year-over-year amid gains in all but two of the last 25 months.
- The metro is one of very few in the US that is currently seeing strong retail sector hiring, as retail trade jobs are up more than 3% from a year ago.
- The unemployment rate has trended consistently in the low-3% range for the past two years, and population growth accelerated to 1.6% in 2016.

SALT LAKE CITY vs US EFFECTIVE RENTS

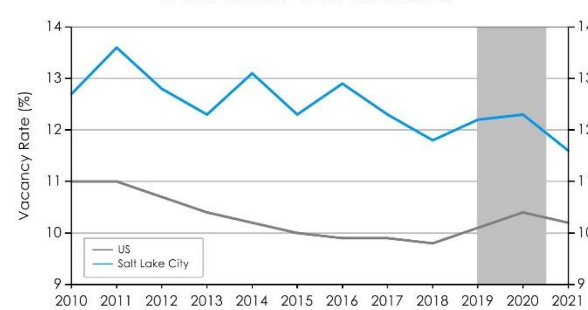


Sources: Reis, Ten-X Research Forecasts

RETAIL ABSORPTION IS RETURNING AS RENT GAINS PICK UP

- Salt Lake City retail demand has been solidly positive through the first half of 2017, following a sharp negative turn in the second half of 2016.
- Vacancies declined 10 bps on the quarter to 12.5%, per Reis, and will hit a low of 11.8% in 2018.
- A 2019-20 contraction is forecast, but a strong bounce-back in 2021 would pull retail vacancies down to 11.6%.
- Rent growth is accelerating, and will help drive 3.2% average annual NOI gains through 2018. NOI will be roughly flat in 2019-20 but return to 2.4% growth in 2021, coming out of the stress test.

SALT LAKE CITY vs US VACANCIES



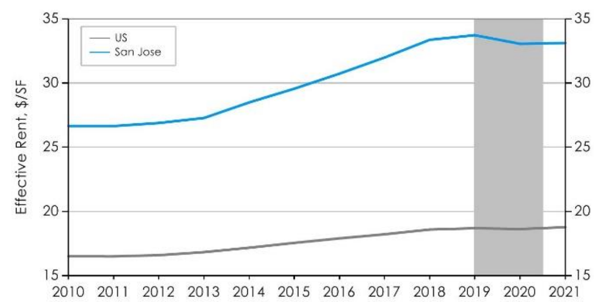
Sources: Reis, Ten-X Research Forecasts

#5 San Jose

SAN JOSE BENEFITS FROM HIGH INCOMES, EVEN AS JOB GROWTH SLOWS

- Year-over-year metro job growth slowed to 1% most recently, its slowest pace since the recession.
- Indeed, the economy's retail trade sector has shed jobs at a 1.2% clip in the past year.
- Demographics give some cause for concern, as population growth slowed to 0.5% in 2016.
- Per capita income of $81,592 in 2015 ranked San Jose as one of the most affluent markets in the US, a boon for retail and consumer spending.

SAN JOSE vs US EFFECTIVE RENTS

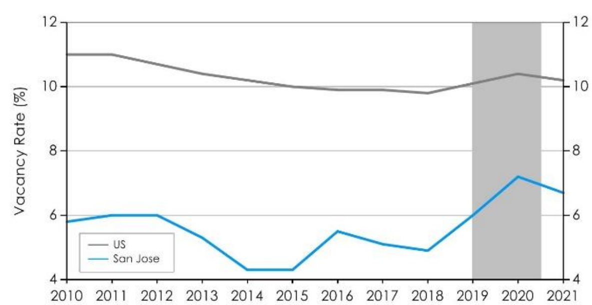


Sources: Reis, Ten-X Research Forecasts

RETAIL OUTLOOK IS STRONG SHORT-TERM, BUT THE MARKET FACES SOME VOLATILITY RISK

- San Jose retail is currently a model of strength; vacancies are down from a year ago at 5.2%, per Reis, while rents are up 4.6% year-over-year.
- Vacancies are forecast to dip below 5% by 2018 as rents average growth in excess of 4% per year in that span, translating to 4.5% annual NOI gains.
- The 2019-20 downturn scenario presents the specter of volatility, as disruption to the tech-levered economy would result in spiking vacancies and stymied rents. This scenario would see NOI decline from 2019-20 before inching up in 2021.
-

SAN JOSE vs US VACANCIES



Sources: Reis, Ten-X Research Forecasts

× TOP SELL MARKETS

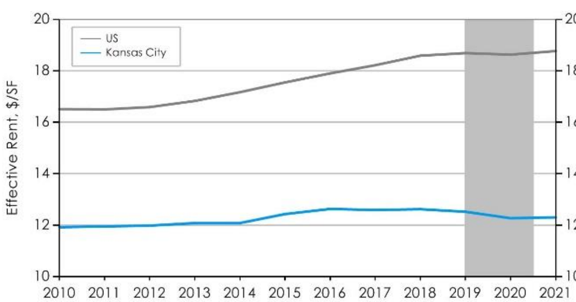
Owners of retail properties in these markets might consider selling.

#1 Kansas City

KANSAS CITY'S ECONOMY IS DRAGGING ITS FEET IN 2017

- Despite 2% job growth from a year ago, Kansas City has only grown employment a paltry 0.2% in the past six months, a major slowdown.
- Retail trade jobs are down more than 1% from a year ago, crimping the demand for retail space.
- Demographics are slowly improving, as population growth accelerated to 1% in 2016, better than the US rate.
- Like most major metros, Kansas City has seen unemployment tighten to less than 4% of late.

KANSAS CITY vs US EFFECTIVE RENTS

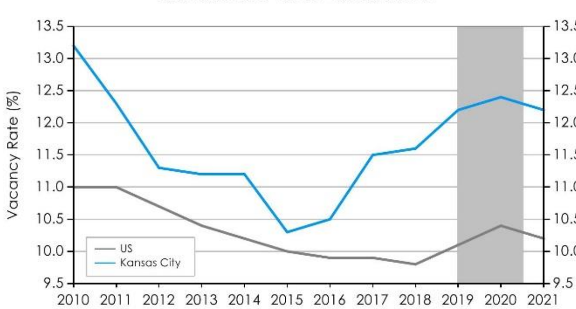


Sources: Reis, Ten-X Research Forecasts

VACANCIES AND RENTS ARE RAPIDLY ERODING

- Kansas City retail net absorption has been negative in four of the past five quarters, lifting vacancies 110 bps in that span, to 11.2% per Reis.
- Effective rents are deteriorating, and are up 0.3% year ago after two straight quarterly declines.
- With its worsening fundamentals, we expect NOI to decline in 2017 and eke out 0.1% growth in 2018.
- Upon introduction of the 2019-20 stress test scenario, already comprised fundamentals will worsen further, causing NOI to contract nearly 2% per year.

KANSAS CITY vs US VACANCIES



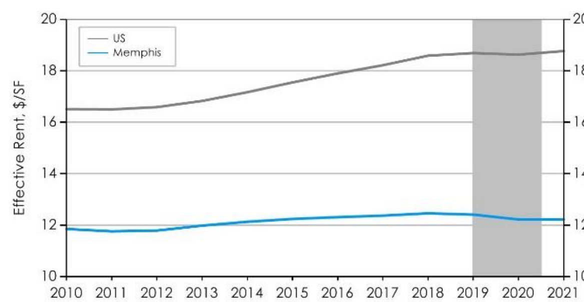
Sources: Reis, Ten-X Research Forecasts

#2 Memphis

POOR JOB GROWTH AND A STAGNANT POPULATION POSE CHALLENGES

- Memphis employment finally eclipsed its pre-recession peak and is up 1.9% year-over-year.
- Unemployment has fallen to the mid-4% range but is still elevated relative to the US average.
- Weakening demographics pose a challenge to further economic growth, as population has slowed to a crawl, barely increasing over the past four years. The annual growth rate has not eclipsed 0.1% since 2012.

MEMPHIS vs US EFFECTIVE RENTS

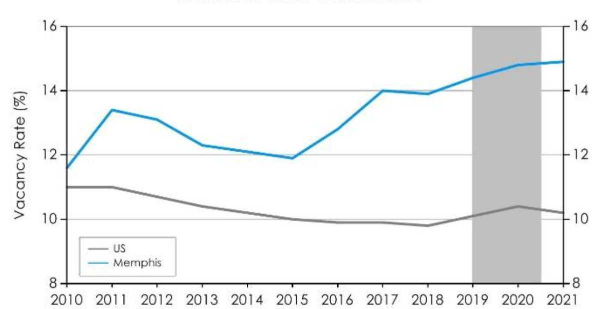


Sources: Reis, Ten-X Research Forecasts

MEMPHIS RETAIL NOI WILL DECLINE IN FOUR OF THE NEXT FIVE YEARS

- Memphis retail vacancies are up 140 bps year-over-year at 13.4%, per Reis.
- Demand has been largely negative since 2015, and is being compounded by sporadic completions.
- Rents are up a meager 0.4% from a year ago.
- Vacancies are forecast to increase further, to 14% by yearend 2017. The 2019-20 stress test will damage fundamentals further and leave availability near 15% by 2021.
- Retail NOI is projected to finish 2021 well below its current level.

MEMPHIS vs US VACANCIES



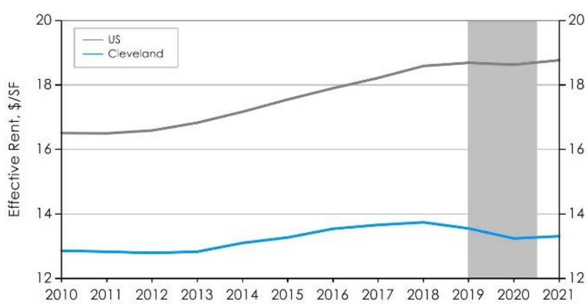
Sources: Reis, Ten-X Research Forecasts

#3 Cleveland

CLEVELAND IS PLAGUED BY SLOW JOB GROWTH AND POPULATION OUTFLOWS

- Inconsistent, choppy job growth has resulted in a 1.2% payroll gain from a year ago, slower than the US average rate of growth.
- Cleveland's retail trade sector has been in decline for a year and a half, with jobs down more than 1% from a year ago.
- Metro unemployment is up from a year ago at 6.1%, far higher than the US average.
- The metro continuously faces demographic challenges, as its population has decreased in 19 of the last 20 years.

CLEVELAND vs US EFFECTIVE RENTS

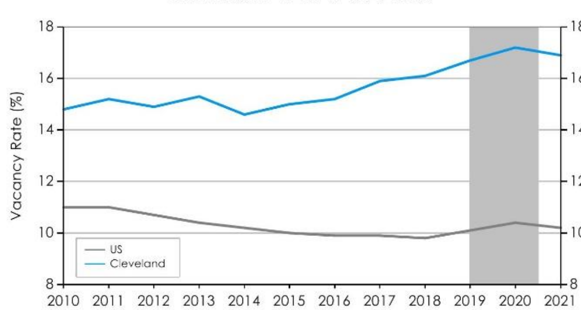


Sources: Reis, Ten-X Research Forecasts

CLEVELAND'S RETAIL MARKET IS SET TO WORSEN THROUGH 2021

- Market retail absorption has been negative in 8 of the past 10 quarters, reflecting Cleveland retail's long-running struggles.
- The current vacancy rate of 15.7%, per Reis, is forecast to rise to nearly 17% by yearend 2021.
- Effective rents are growing at a sub-1% annual pace, which will continue through 2018 before contractions in 2019-20.
- NOI will grow marginally through 2018, but suffer mid-2% annual losses in 2019-20.
- The 2021 reintroduction of growth will bring little reprieve in the form of more sub-1% NOI growth.

CLEVELAND vs US VACANCIES



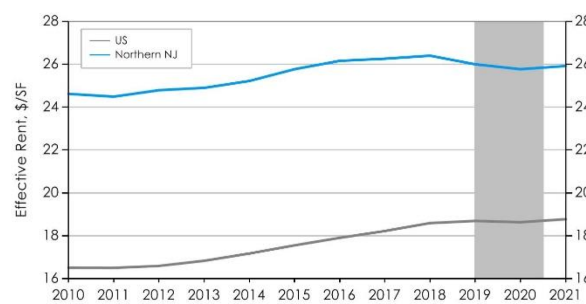
Sources: Reis, Ten-X Research Forecasts

#4 Northern NJ

NORTHERN NJ IS SLOGGING THROUGH ITS ECONOMIC EXPANSION

- Total employment in Northern NJ is up a below-average 1% from a year ago.
- Jobs in the critical education/healthcare sector are up an identical 1% year-over-year, while retail trade jobs have grown 1.7% from a year ago.
- The pace of metro population growth has been gradually slowing down since 2011, as the population only grew a modest 0.3% in 2016.
- Unemployment is trending near the US average in the low-4% range.

NORTHERN NJ vs US EFFECTIVE RENTS

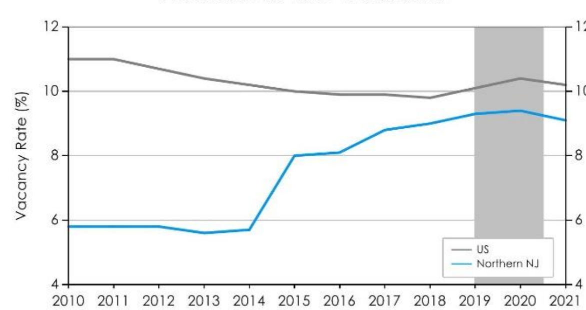


Sources: Reis, Ten-X Research Forecasts

HIGH AVAILABILITY WILL CONSTRAIN FUTURE NOI PROSPECTS

- Northern NJ's retail vacancy rate is up 60 bps from a year ago at 8.6%, per Reis, and will continue rising to the low-9% range by 2021.
- Effective rents will eke out sub-0.5% annual gains through 2018, decline amid the 2019-20 stress test, and return to weak 0.5% growth in 2021 as economic growth is reintroduced.
- Given the market's weak retail fundamentals, we project NOI growth to average 0.7% annual losses through 2020, followed by sub-1% growth in 2021.

NORTHERN NJ vs US VACANCIES



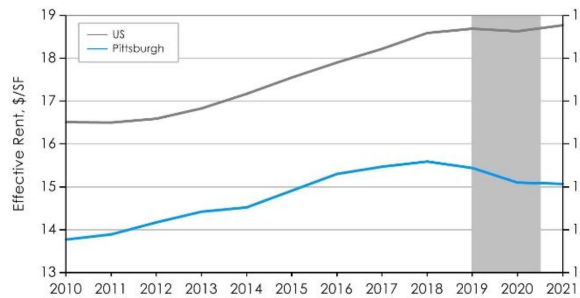
Sources: Reis, Ten-X Research Forecasts

#5 Pittsburgh

PITTSBURGH'S ECONOMY HAS BARELY GROWN THIS CYCLE

- Pittsburgh's current 1% year-over-year rate of job growth is the metro's fastest pace this cycle, reflecting the extent of the local economy's struggles.
- Unemployment is stuck in the low-5% range, higher than the US average.
- Pittsburgh's population declined in 2016 for a fourth consecutive year and this weak demographic profile will continue to weigh on job growth prospects.

PITTSBURGH vs US EFFECTIVE RENTS

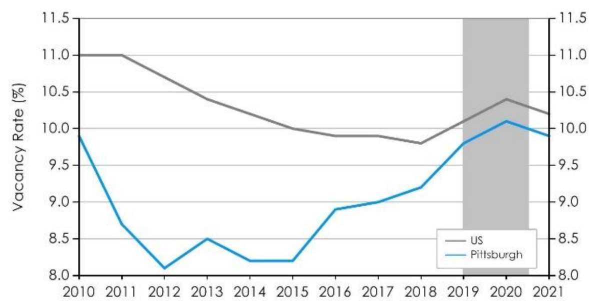


Sources: Reis, Ten-X Research Forecasts

WEAK DEMAND AND POOR RENT GROWTH WILL PREVENT ANY SIZEABLE RETAIL NOI GAINS

- There will be little new supply added in the coming years, but weak demand will boost vacancies to around 10% by 2021.
- Effective rents will reflect poor real estate fundamentals, as rent growth will be constrained to less than 1% per annum through 2018, followed by three straight annual losses from 2019-21.
- NOI projects to average 0.8% gains per annum through 2018, followed by declines from 2019-20.

PITTSBURGH vs US VACANCIES



Sources: Reis, Ten-X Research Forecasts

×TEN-X RESEARCH

Ten-X Research, led by Chief Economist and industry veteran, Peter Muoio, Ph.D. is based in New York. The group focuses primarily on custom analysis and business development support services, as well as industry-leading data science and predictive modeling initiatives.