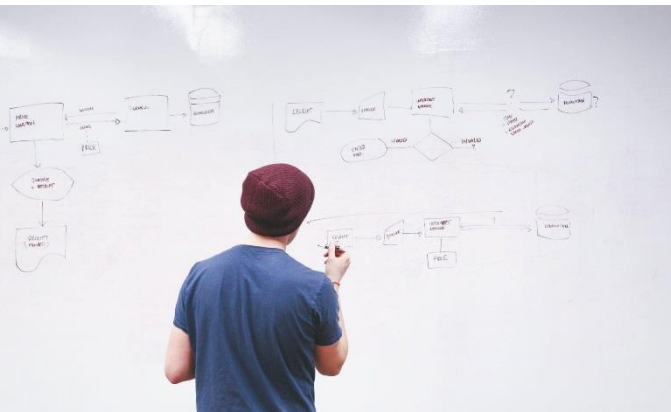




Midwest City Innovation District

Framework Plan & Implementation Roadmap

HR&A is a real estate and economic development consulting firm working at the intersection of the public and private sector—our work transforms communities and revitalizes urban environments in the United States and abroad.



HR&A evaluated the potential to create an Innovation District in Midwest City through a real estate, industry, and physical conditions analysis.

January

Stakeholder Interviews

- Interviewed 16 public, private, and institutional stakeholders
- Reviewed existing plans and documents

January–March

Economic and Physical Conditions Assessment

- Conducted a real estate market study of Midwest City and the Oklahoma City region
- Prepared an industry cluster analysis to identify potential partnership opportunities
- Identified market-supportable development programs and tested financial feasibility
- Assessed site conditions, land use, and ownership to confirm Innovation District boundaries

April–June

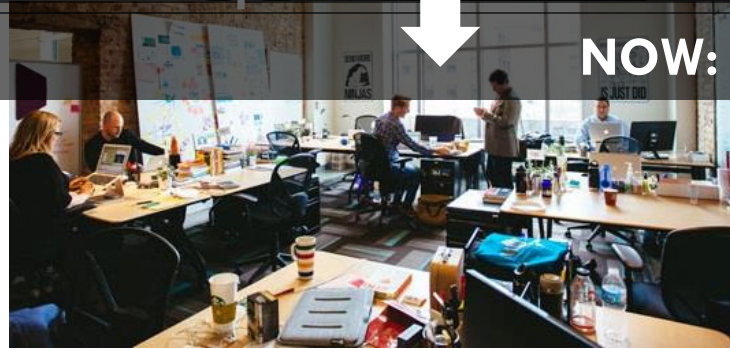
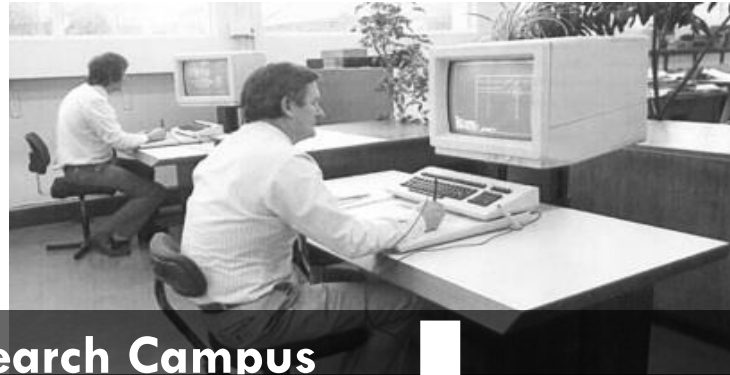
Innovation District Framework Plan

- Developed a short-term implementation road map to launch the Innovation District

Research and development is now increasingly occurring in mixed-use, walkable, and vibrant innovation districts that respond to 21st century needs.



THEN: 20th Century Research Campus



NOW: 21st Century Innovation District



Midwest City is seeking to create an Innovation District to achieve multiple goals.



Enhance Midwest City's image



Create a vibrant destination



Foster a future workforce for Tinker Business & Industrial Park (TBIP) and Tinker Airforce Base

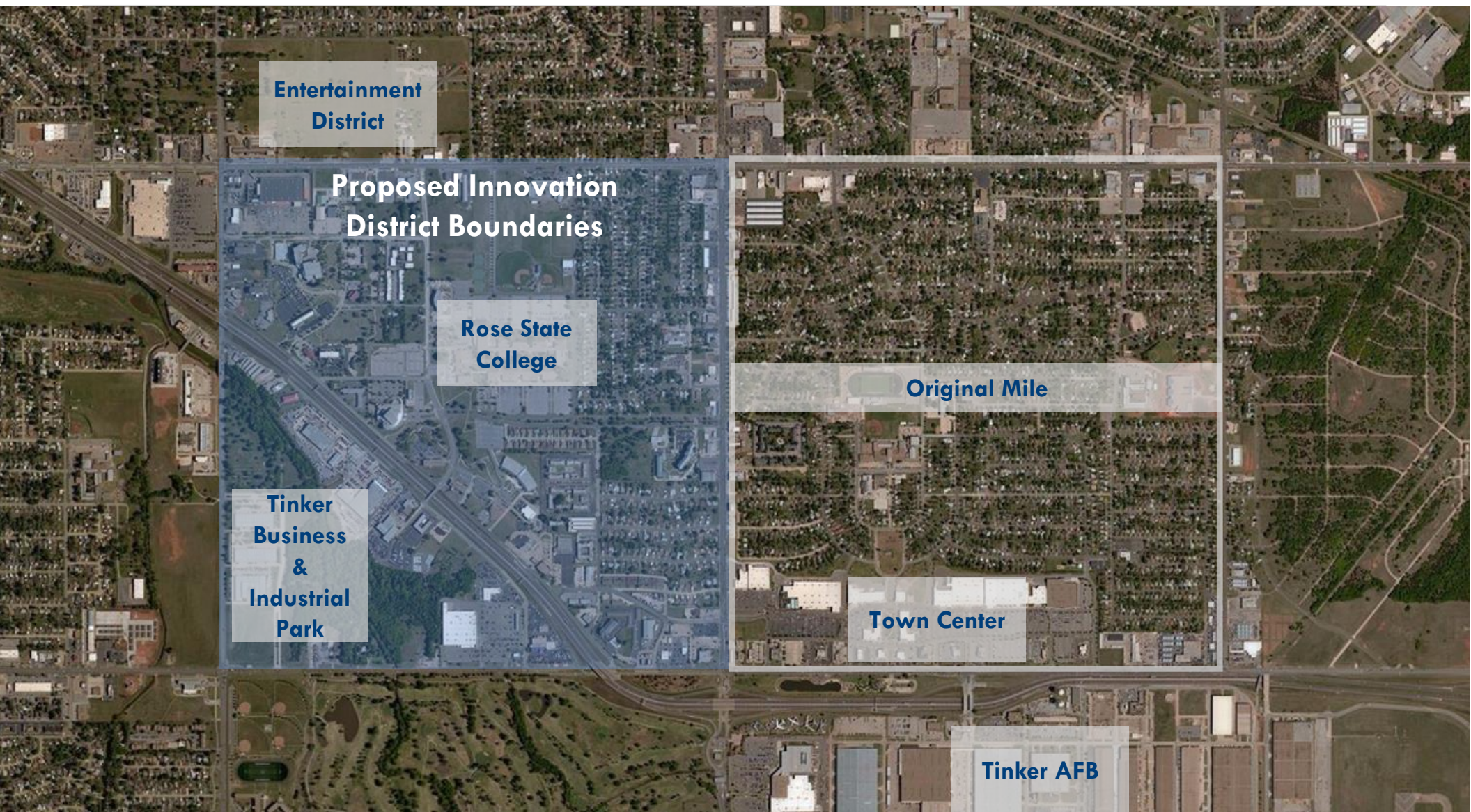


Bolster city-wide economic development

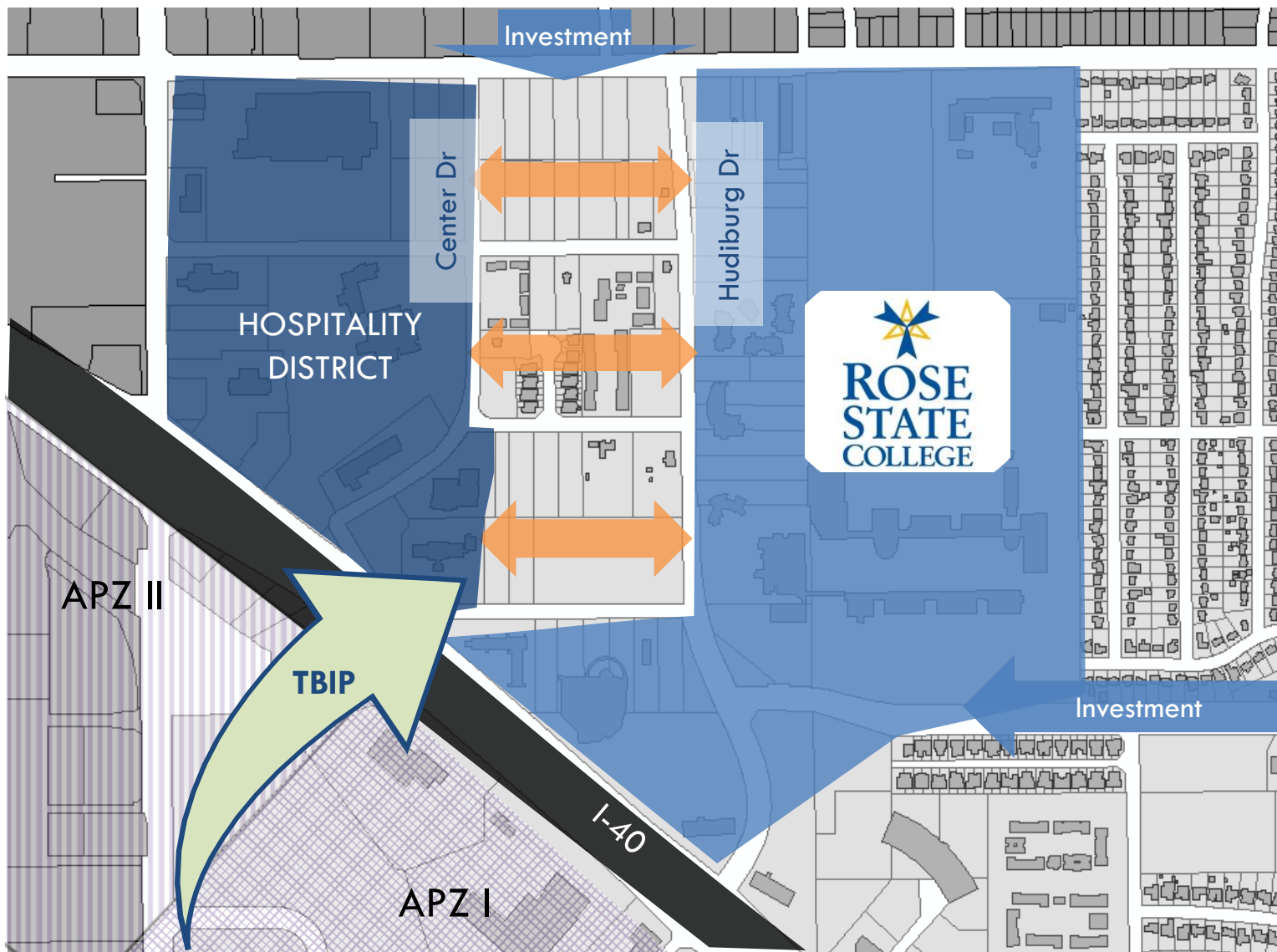


Attract partnerships that may expand existing curriculums or create new technology-focused programs

Midwest City's proposed Innovation District is located in the southwest corner of the City, just west of the Original Mile neighborhood.



Connecting and activating the existing area between the Hospitality District and Rose State College could create the core of the future Innovation District.



New multi-family development and ancillary retail can attract new residents to the area, activate the District, and catalyze new development.

Use

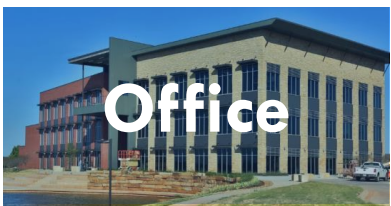
Key Finding



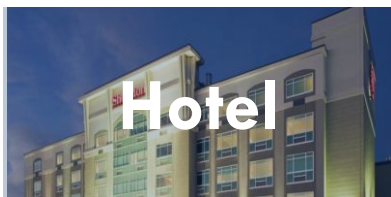
- There is likely demand for **high-quality, multi-family development** to create a vibrant, urban neighborhood similar to what is seen in Downtown Oklahoma City.



- Retail in Midwest City is performing well, but shows signs of being **over-supplied**. However, there is **opportunity for limited curated and active retail**, such as a brew pub or coffee shop.






- Without a large anchor tenant, new **speculative office space is unlikely to succeed**.



- The **hotel supply in the regional submarket has increased** in recent years indicating a crowded market.

Midwest City can leverage its growing, tech-based industries to cultivate an entrepreneurial community and build new partnerships.

HR&A assessed potential industries well-positioned to grow and expand as a result of the Innovation District.

	Pros	Cons	Opportunity
Aerospace 	<ul style="list-style-type: none"> • High growth • Industry and government partners 	<ul style="list-style-type: none"> • Few individual businesses • Competing regional centers 	Medium/Low
Additive Manufacturing 	<ul style="list-style-type: none"> • Specialized • Defense applications 	<ul style="list-style-type: none"> • High startup costs • Automation 	Medium
Cyber Security 	<ul style="list-style-type: none"> • Concentrated • Defense applications 	<ul style="list-style-type: none"> • Weak local tech sector 	Medium

To target key industries, the Innovation District should be positioned as a unique asset within the region that builds off existing skills and activities, such as maintenance and renovation.

New multi-family development and ancillary retail can attract new residents to the area, activate the District, and catalyze new development.

Market-Supportable Program Options

	Lower Density	Higher Density
Convergence Center	Yes	Yes
Residential	100–150 Units	200–500 Units
Retail	2,000–3,000 SF	5,000–10,000 SF
Flex Office	5,000–10,000 SF	10,000–25,000 SF
Built-to-Suit Office	0–50,000 SF	0–50,000 SF
Hotel	0 SF	0–50,000 SF

Short-Term

Long-Term

Midwest City's Innovation District can physically support complimentary uses that build vibrancy and promote density in the area.

STEM & Convergence Center

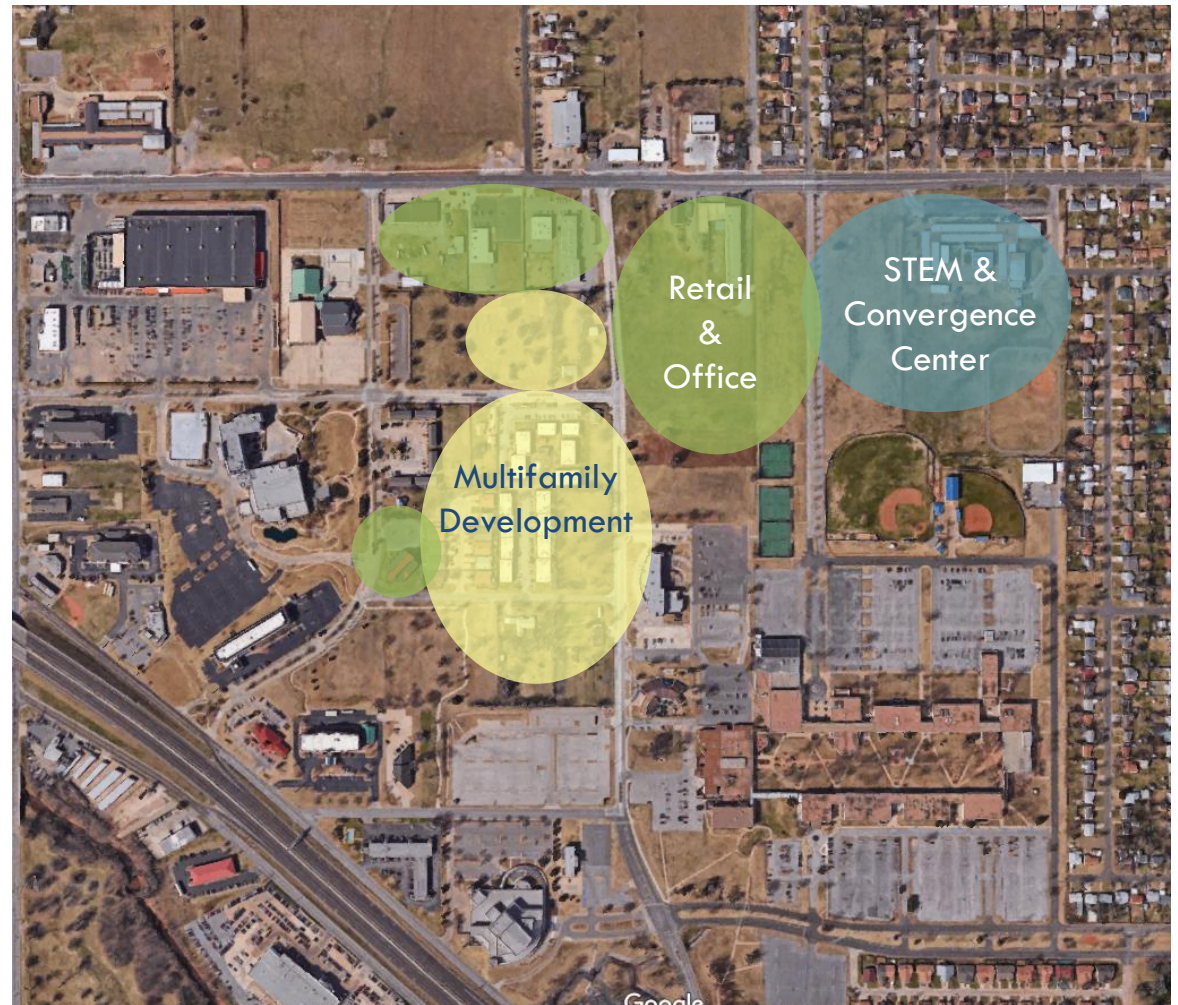
- ~20,000 square foot Convergence Center potentially aligned with Rose State College

Retail & Office

- Phased retail and office development

Multifamily Redevelopment

- Replacement of outdated housing stock with market-rate multifamily product
- New apartments are currently under development



The future development of the Innovation District should be guided by a clear and flexible vision statement crafted by various stakeholders.

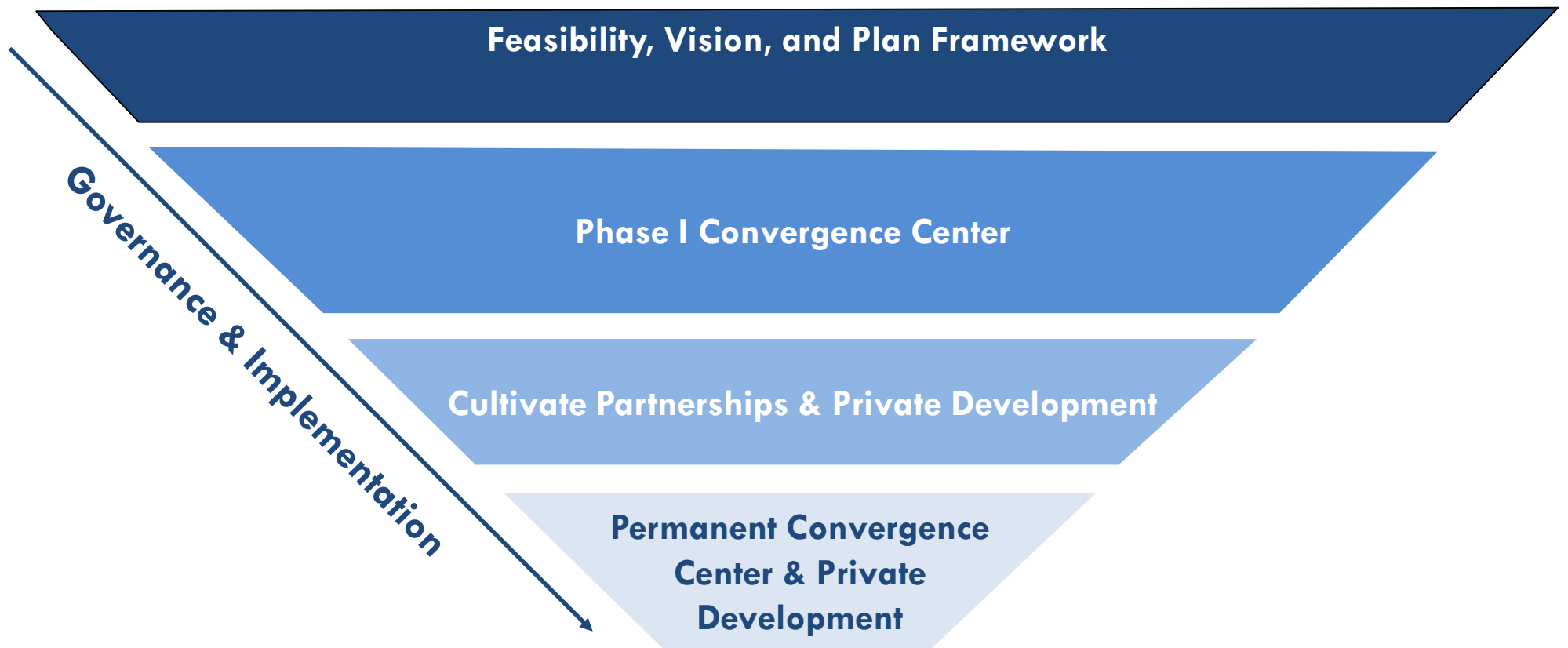
Vision Statement

*The Midwest City Innovation District will embrace the **bold, entrepreneurial and visionary legacy of America's City of Tomorrow.***

*It will serve as an **economic engine**, promoting job growth through partnership and innovation. Anchored by an **open and engaged Convergence Center**, the District will be a **place for living and learning**. This new community of collaboration will bring together friends and families, students and teachers, innovators and creators.*

The Midwest City Innovation District will enlighten a whole new generation of Oklahomans with a drive to discover and a desire to push their imagination and creativity.

Future phases of the Innovation District should include a Convergence Center and foster private development, supported by a strong governance model.



Convergence Center

A Phase I concept for the Convergence Center can be supported in a modest space to host programs, co-working spaces, and collaborative activities.



THE FRONTIER, RTP

Implementation Roadmap | Months 1–8: Identify a site and develop an ownership model.



Location

- Commit to a ~5,000 space after reviewing options, availability, and costs for options in the Innovation District boundaries
- The former Arts Center building located on Center Drive is a promising option



Partnership Structure

- Develop contractual agreements similar to Covenants, Conditions, and Restrictions (CC&Rs) that would allow for limited engagement between partners
- Explore partnerships between the retail use and innovation-related programming (e.g., drone education) that activate and compliment both spaces



Marketing

- Market the concept to amenity partners, like a pub/brewery or café to attract users to the District



Design

- Engage a landscape architect/designer to create a placemaking strategy

Implementation Roadmap | Months 9–12: Fit out the space.

- Within a year of announcing the District, fit out of the space should be completed to maintain momentum and provide a proof of concept
- Fit out should be accomplished using existing materials, expertise, and resources, if possible
- Design principles that maximize the impact of the building are open office design, integrated food and beverage options, and flexibility in the layout to accommodate new ideas as they arise



Existing Underutilized Space



Integrated F&B



Flexible Programming

Implementation Roadmap | Years 2–3: Operations phase and eventual transition to a permanent space focused on achieving an activated space.

Convergent programming strategies could include:



Pop up spaces for new or existing businesses and retail spaces



Tie in activities occurring at the Community Learning Center and the Reed Conference Center

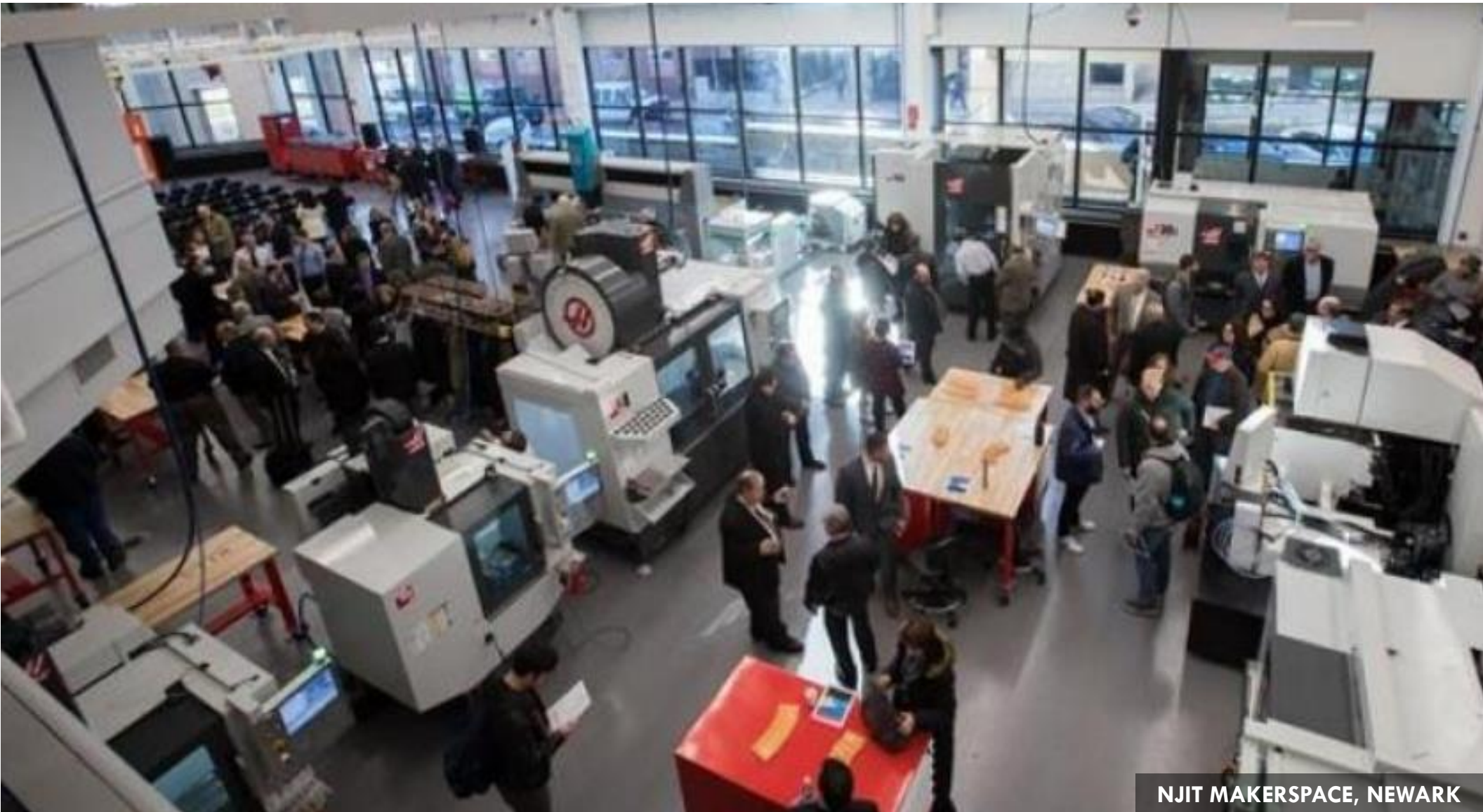


Drone education that leverages trainings offered at TBIP and Rose State cyber-education curriculum

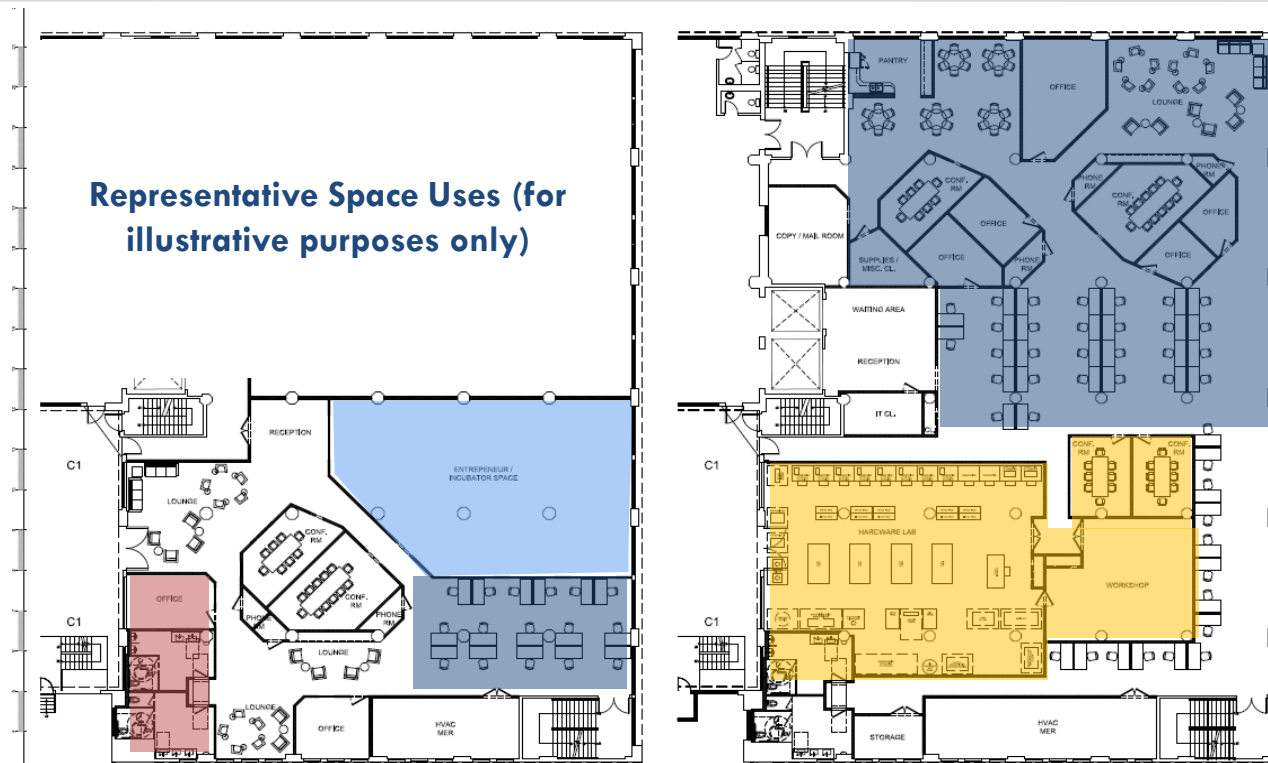
**Most
Activating**

**Less
Activating**

The Phase I concept can evolve into a permanent Convergence Center to incorporate partnerships in Advanced Manufacturing.



The diverse uses of a permanent Convergence Center are best utilized when they are well-integrated into a single space.



Co-working Space

- ~80 desks/small offices
- Conference rooms & breakout, lounge space

Community Space

- Event or programmed space open to the public

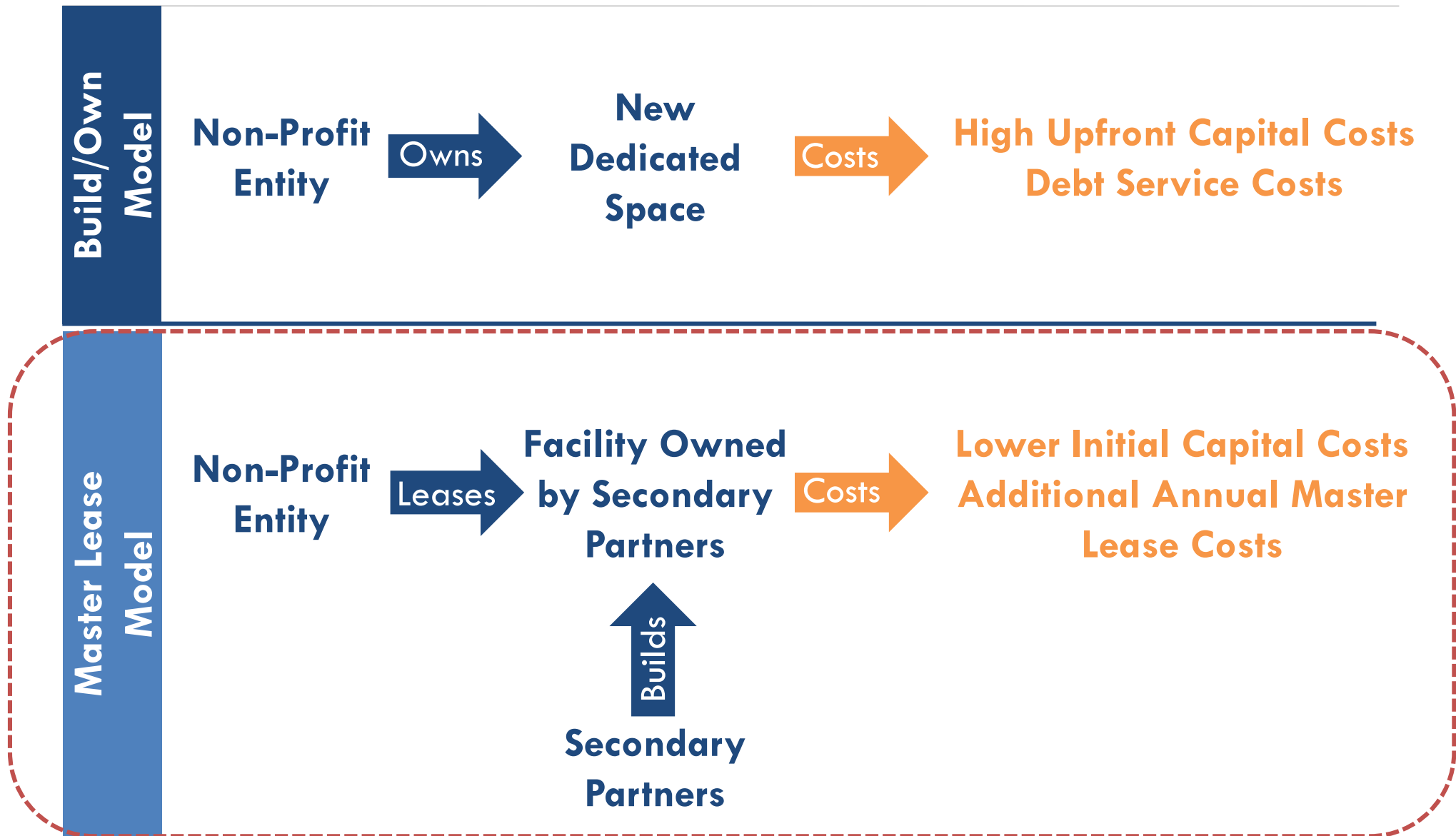
Food & Beverage

- Ancillary retail to help activate the space
- Potential uses include café, sandwich shop, and/or pub

Advanced Manufacturing Hardware Space

- Open space with for-rent equipment for entrepreneurs and partners

Convergence Centers are generally owned either directly or through partnerships; control is maintained via master lease agreements.



In the first two years, implementation activities should be focused on initial planning and governance for a future permanent Convergence Center.

Years 1 & 2 — Concurrent with the first phase Convergence Center



Site selection/acquisition.

- Near existing anchors (Rose State College, upcoming Warren Theatre)
- Vacant land either in public hands or a supportive private owner that can minimize land costs
- Located toward the center of the Innovation District as a driver for economic redevelopment



Conduct a governance exercise to **identify the long-term leadership** for the Convergence Center



Engage an **architect and costing partner**, if pursuing new construction

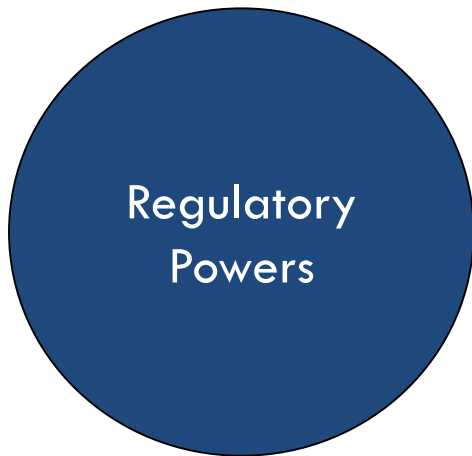


Market to potential partners with low-cost space and the energy created with the first phase Convergence Center

Action plan components beyond year two are too distant to require detailed action steps, but will require development expertise and a programming model to succeed









Facilitating Private Development

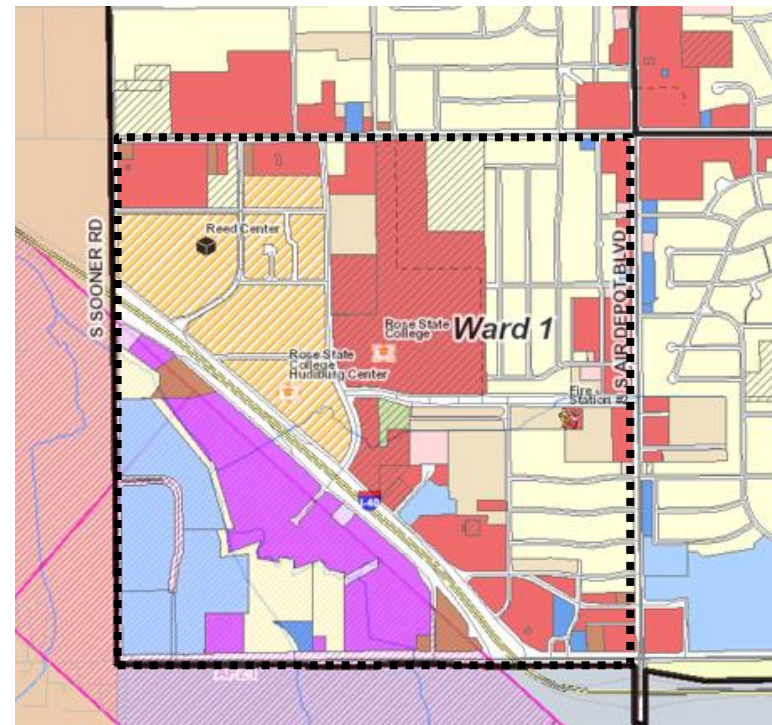
Midwest City can proactively facilitate redevelopment of the Innovation District with the tools at its disposal.



Existing zoning as hospitality is not conducive to a mixed-use Innovation District and should be **changed to allow for residential development** by-right.

Design guidelines will help plan for new development, clearly set development expectations, and ensure high-quality development.

Existing Zone	
	Hospitality
	Commercial
	Low Density Residential
	Industrial
	PUD
	SPUD
	Special Use Permits
	APZ



Infrastructure and placemaking investments, particularly those that connect the District to the rest of the community, should be prioritized.

Placemaking
&
Infrastructure

Urban design is an important concept for Innovation District. The City should consider placemaking infrastructure that improves the urban feel of the District.

Future pedestrian and bicycle improvements can greatly improve access and connection between the Innovation District's anchors, the Hospitality District, and the Original Mile neighborhood.



Effective and targeted support of development in the Innovation District should go to transformative projects and increase local land values.



Development Facilitation

Acquire apartments that are beyond their useful lifespan, clear the sites, and re-sell to a private developer that shares the vision for the Innovation District.

Consider TIF or other **financing mechanisms** to support development and infrastructure investments.

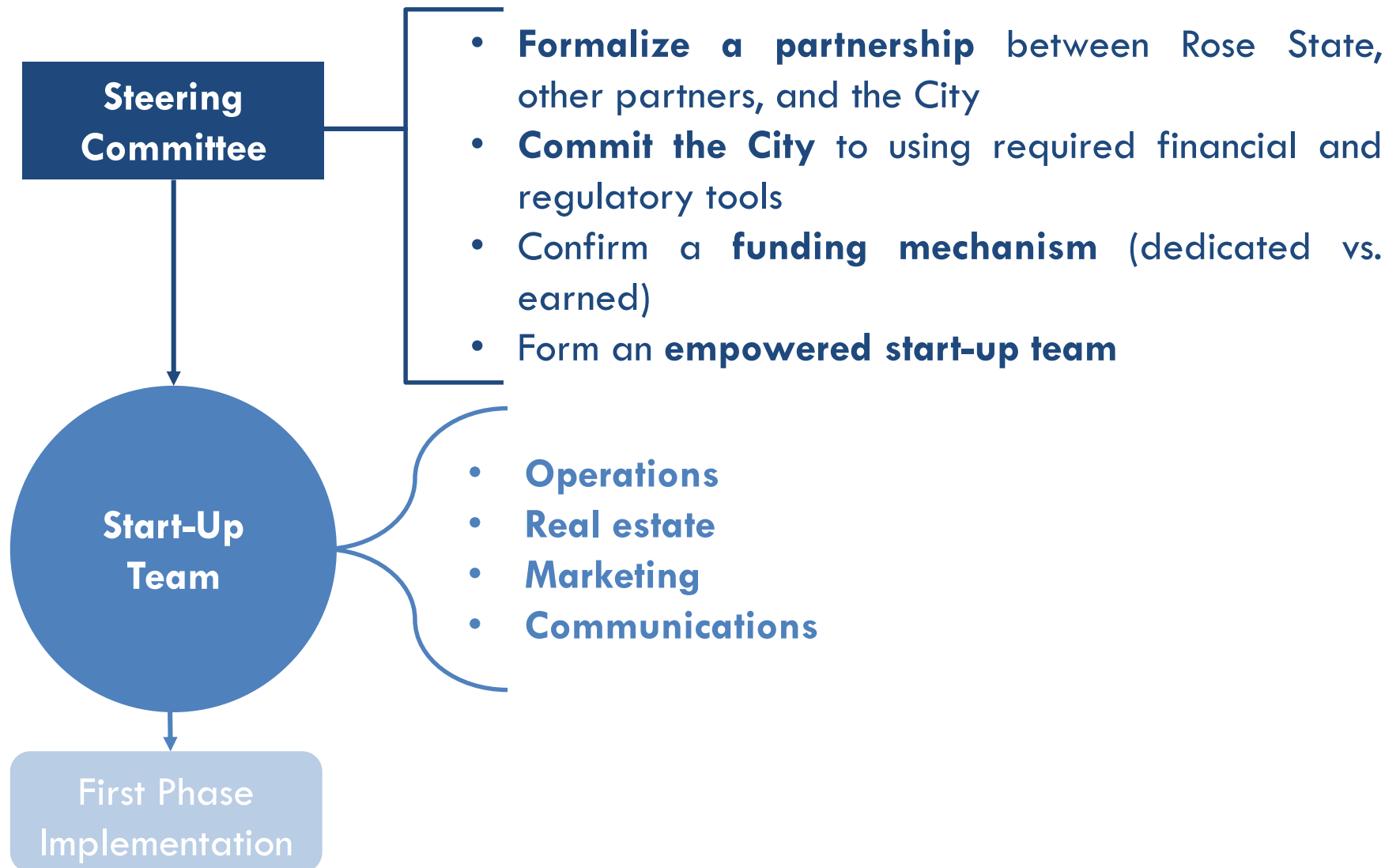
Subsidize individual development that:

- 1) Is aligned with the vision of the District and adds programmatic and economic development value, and
- 2) Is demonstrably in need of assistance to be financially feasible



Governance and Operations Model

To take Midwest City's Innovation District from framework concept to reality, the City should prioritize next steps that are District-level and project-specific.



Next Steps

Phase I Convergence Center

- Utilize existing momentum to **establish partnerships and secure a location** that is low-cost and high impact

Permanent Convergence Center

- Continue to pursue high-value **partnership strategies** as they arise

Private Development

- Utilize **regulation, infrastructure, and development support** to generate developer interest in the Innovation District

District-Wide Planning

- Secure **buy-in from required partners, including the City and Rose State College**, and establish a Governance Strategy and start-up team to carry out the next steps of each phase

Discussion



Midwest City Innovation District

Framework Plan & Implementation Roadmap

JUNE 2018

Appendix

**Economic and Physical Analysis
Presented to City Staff March, 2018**

Contents

Introduction

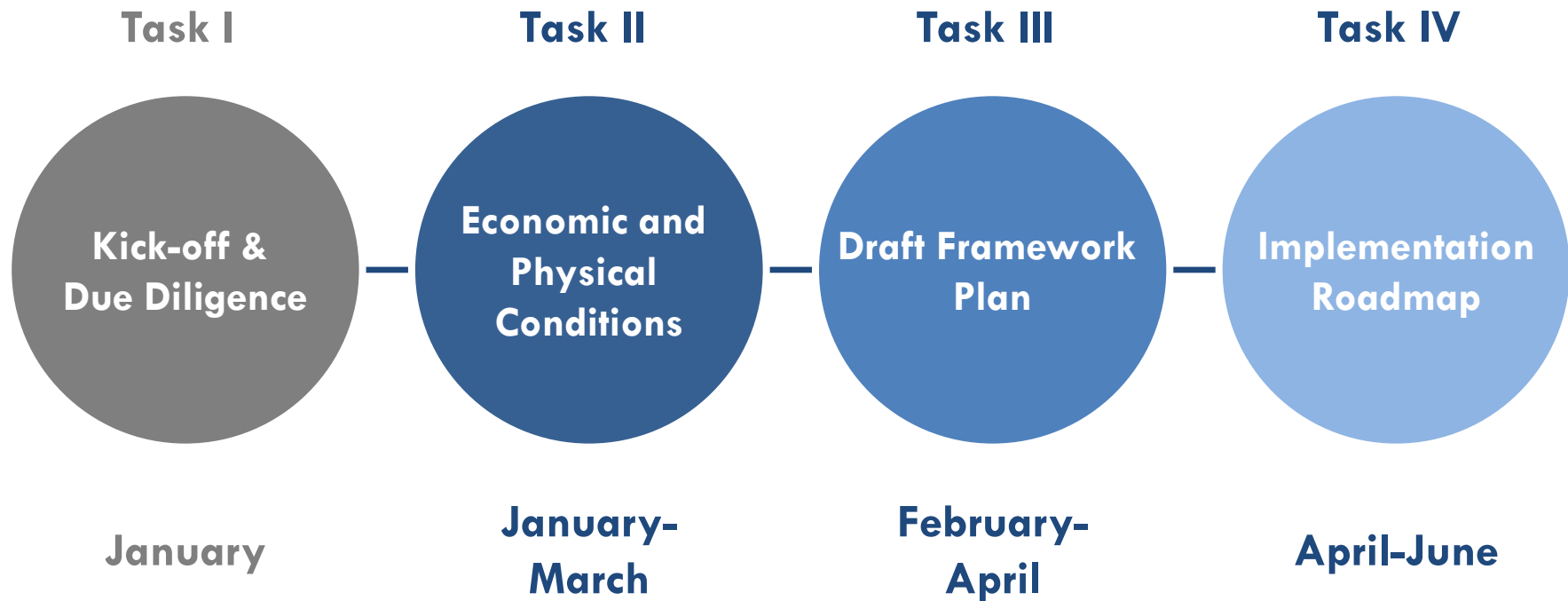
Executive Summary

Initial Findings

- Socioeconomic Context
- Market Scan
 - Residential
 - Office
 - Retail
 - Hotel
- Industry Cluster Analysis
- Physical Conditions Assessment

INTRODUCTION

HR&A conducted a Real Estate Market Scan, Industry Cluster Analysis, and Physical Conditions Assessment to inform the Innovation District Framework Plan.



The Economic and Physical Conditions Assessment is comprised of four analytical tasks.

Socioeconomic Context



- Assess current demographic conditions and trends

Real Estate Market Scan



- Analyze market feasibility of potential uses: residential, office, retail, and hotel

Industry Trends



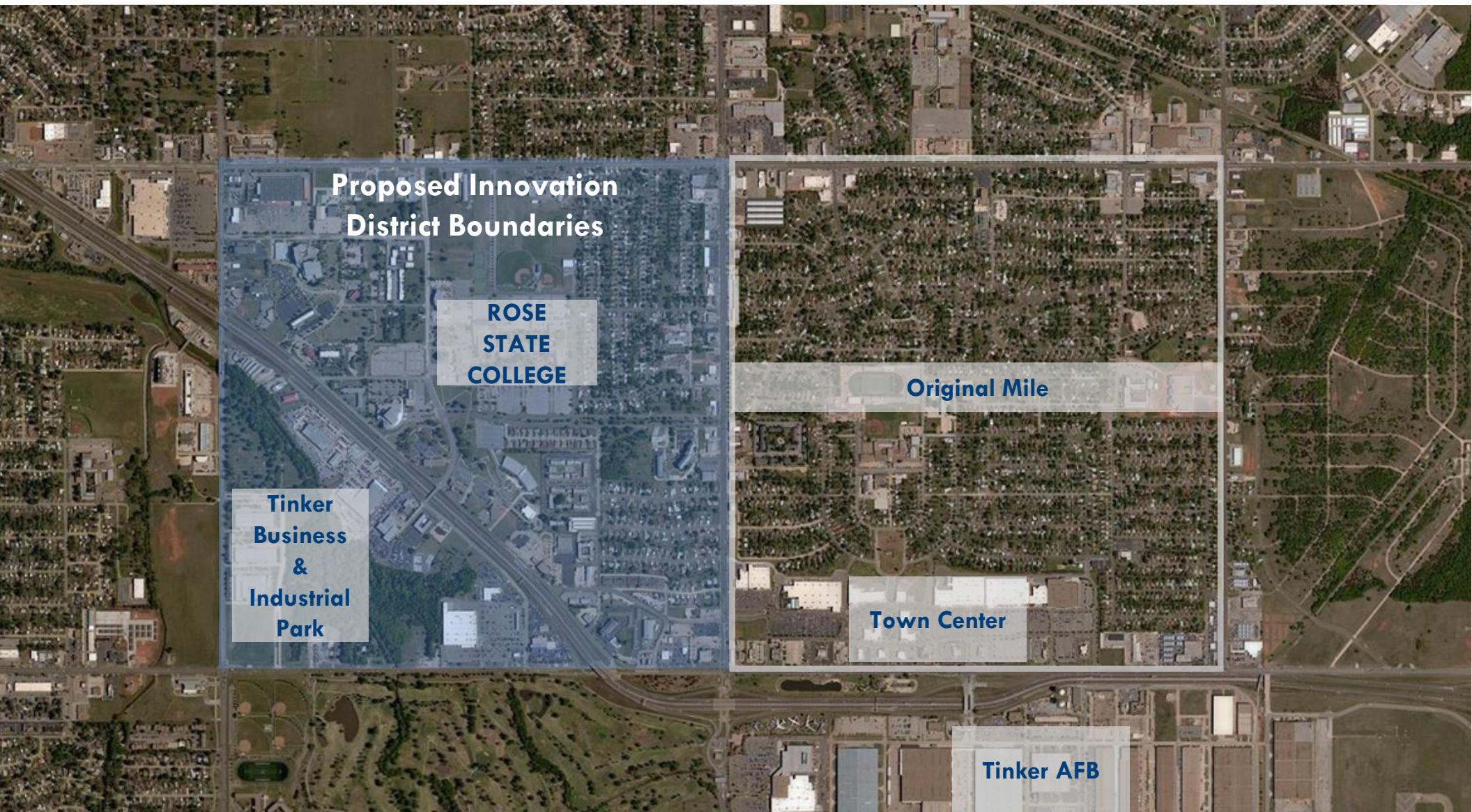
- Examine industrial composition of Midwest City and the greater OK City area
- Identify target industry sectors that leverage City assets

Physical Conditions

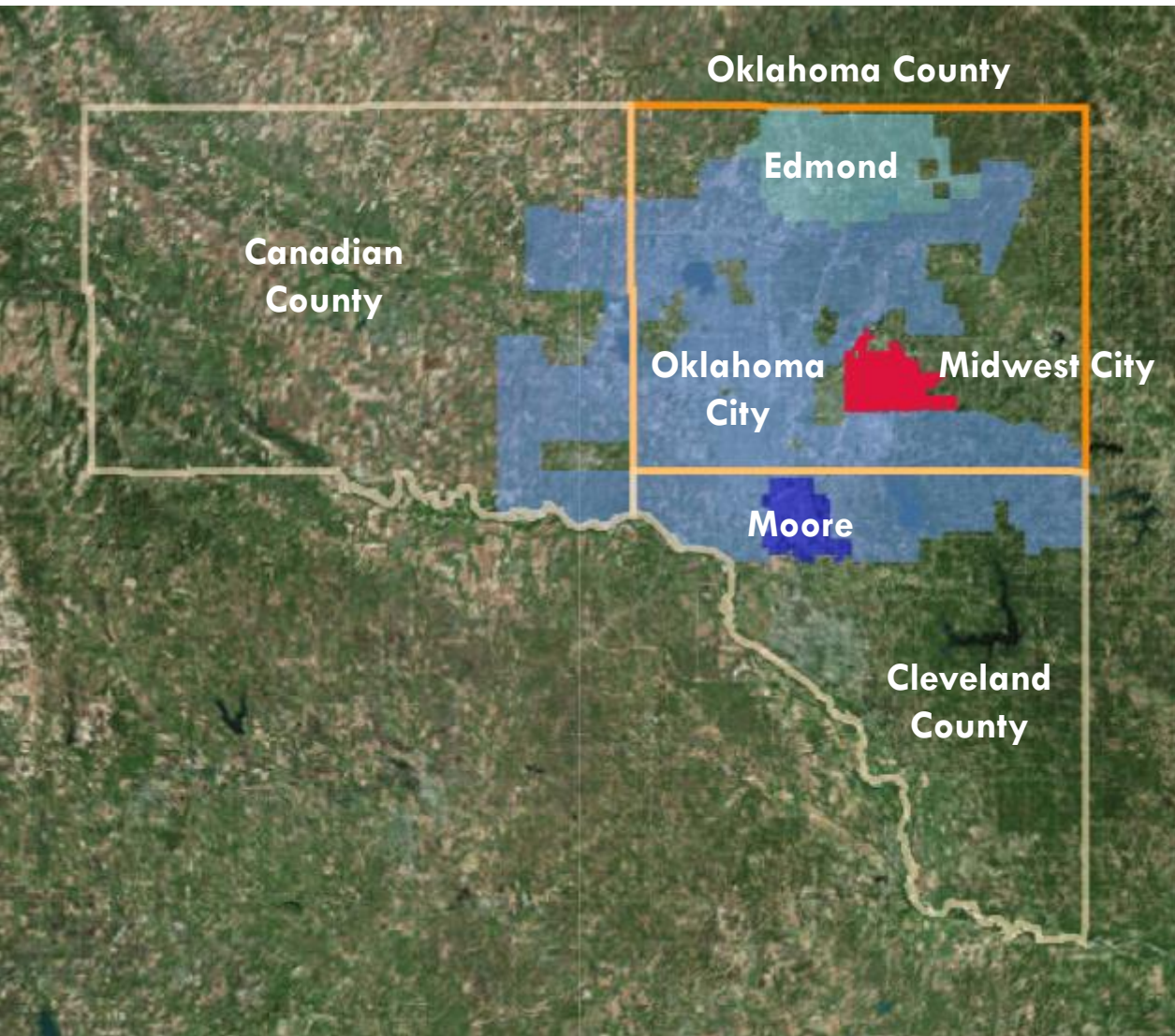


- Inventory land uses and site ownership
- Assess access constraints and opportunities

Midwest City's proposed Innovation District is located in the southwest corner of the City, just west of the Original Mile neighborhood.



The Market Scan includes the Innovation District boundaries, Midwest City, and nearby cities and counties.



- The cities of Oklahoma City, Edmond, and Moore are identified as peer cities for comparative purposes and to establish relative benchmarks against Midwest City
- Due to trends unique to certain asset classes, specific market areas include all or some of Cleveland County, Canadian County, or both

Source: ESRI

The market analysis differentiates between Class A, B, and C products -- a classification dependent upon age, location, tenant qualities, amenities, etc.

Predicated upon market demand and regional expectations, product classes evaluate the competitive ability of specific properties to facilitate comparison across markets. Product classes are used to characterize both the office and residential sectors and tend to filter down with age.

Class A

- Newest, most prestigious, and well-located assets
- Built of highest-quality materials
- Ample amenities
- Above average rents

Class B

- Older than Class A
- Lower-quality due to age
- Renovation and proper upkeep could return to Class A
- Average rents

Class C

- Typically 20 years and older
- Less desirable location
- Needs renovation to be kept up to date
- Below average rents

Source: Building Owners and Managers Association (BOMA) International

In the Oklahoma City market, the product's location, level of finish, and age are particularly important determinants of building class.

Class A

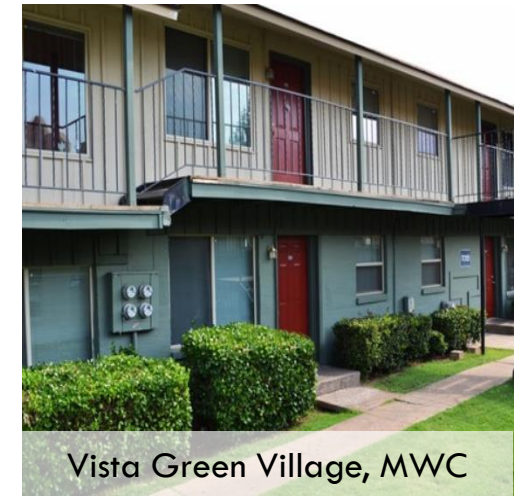
Class B

Class C

Commercial



Residential



Source: CoStar

Executive Summary

Market Scan Key Findings | Residential



Midwest City's multifamily market has not seen the **Class A deliveries** that have characterized vibrant, mixed-use neighborhoods in the region, particularly around Downtown Oklahoma City. These new deliveries average \$1.00-\$1.80 PSF.

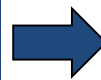


High turnover among young adults suggests a **potential under-tapped rental market** in Midwest City.



Small Class A **infill residential product** is being considered by the development community. Investment in amenities and public realm improvements will support the development of this residential product.

Residential
demand



500-700 multifamily
units by 2028

Market Scan Key Findings | Office



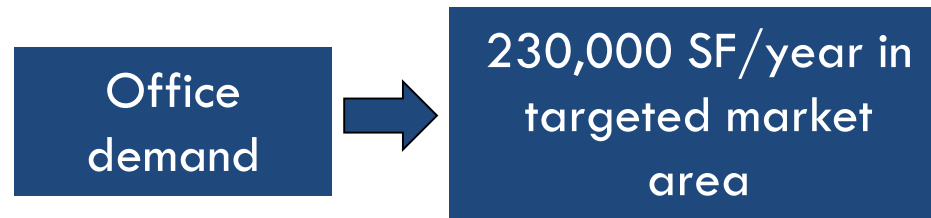
Midwest City's office market has been characterized by **modest deliveries concentrated along S. Douglas Boulevard**, while rents have remained flat at \$13 PSF and vacancy steady at 10%.



Across the broader market area, there is projected demand of **230,000 SF of new Class A office space annually**, driven by job growth in health care and professional services industries.



To ensure success, new office development should be supported by **anchor tenants, such as local institutions or employers, or adopt more flexible formats.**



Market Scan Key Findings | Retail



Newer, subsidized retail product in Midwest City is performing well, with \$22 PSF rents and vacancies at or below 5%. However, significant aging retail product is driving down average rents across the City to \$12 PSF with vacancies at 17%.

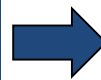


There is no market demand gap for most retail products at the Innovation District site. There is limited demand projected in food and beverage retail.



The Midwest City Innovation District can fill the gap in **food and beverage retail** with targeted small-format restaurants and quick-service options.

Retail
demand



8,300 SF food and
beverage retail

Market Scan Key Findings | Hotel



The Southeast Oklahoma City Submarket has **recently expanded**, including new hotels being delivered in Midwest City's hotel district. Average Daily Rates and occupancy have fallen in recent years.

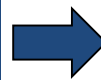


In submarkets like Downtown Oklahoma City and the Airport, new hotels are providing **increased amenities or dynamic locations at a variety of price points**, absorbing any new demand in the region.



There is **no market opportunity** for additional hotel product at this time.

Hotel
demand



No short-term hotel
opportunity

Industrial Cluster Analysis Key Findings

- HR&A identified **targeted industry opportunities** based on interviews with stakeholders and industry research.
- Aerospace, additive manufacturing, and cyber security industries were identified for their **growth potential, regional specialization, employment magnitude, and potential to leverage local opportunities.**

Aerospace



Additive Manufacturing



Cyber Security



INDUSTRY FILTERS




- High growth
- Specialized
- Large number of jobs
- Aligned with local opportunities

INDUSTRY FILTERS

Recommended near-term opportunities for partnerships

Industrial Cluster Analysis Key Findings

HR&A assessed potential industries well-positioned to grow and expand as a result of the Innovation District.

	Pros	Cons	Opportunity
Aerospace 	<ul style="list-style-type: none"> • High growth • Industry and government partners 	<ul style="list-style-type: none"> • Few individual businesses • Competing regional centers 	Medium/Low
Additive Manufacturing 	<ul style="list-style-type: none"> • Specialized • Defense applications 	<ul style="list-style-type: none"> • High startup costs • Automation 	Medium
Cyber Security 	<ul style="list-style-type: none"> • Concentrated • Defense applications 	<ul style="list-style-type: none"> • Weak local tech sector 	Medium

To target key industries, the Innovation District should be positioned as a unique asset within the region that builds off existing skills and activities, such as maintenance and renovation.

Physical Conditions Analysis Key Findings

Site Constraints

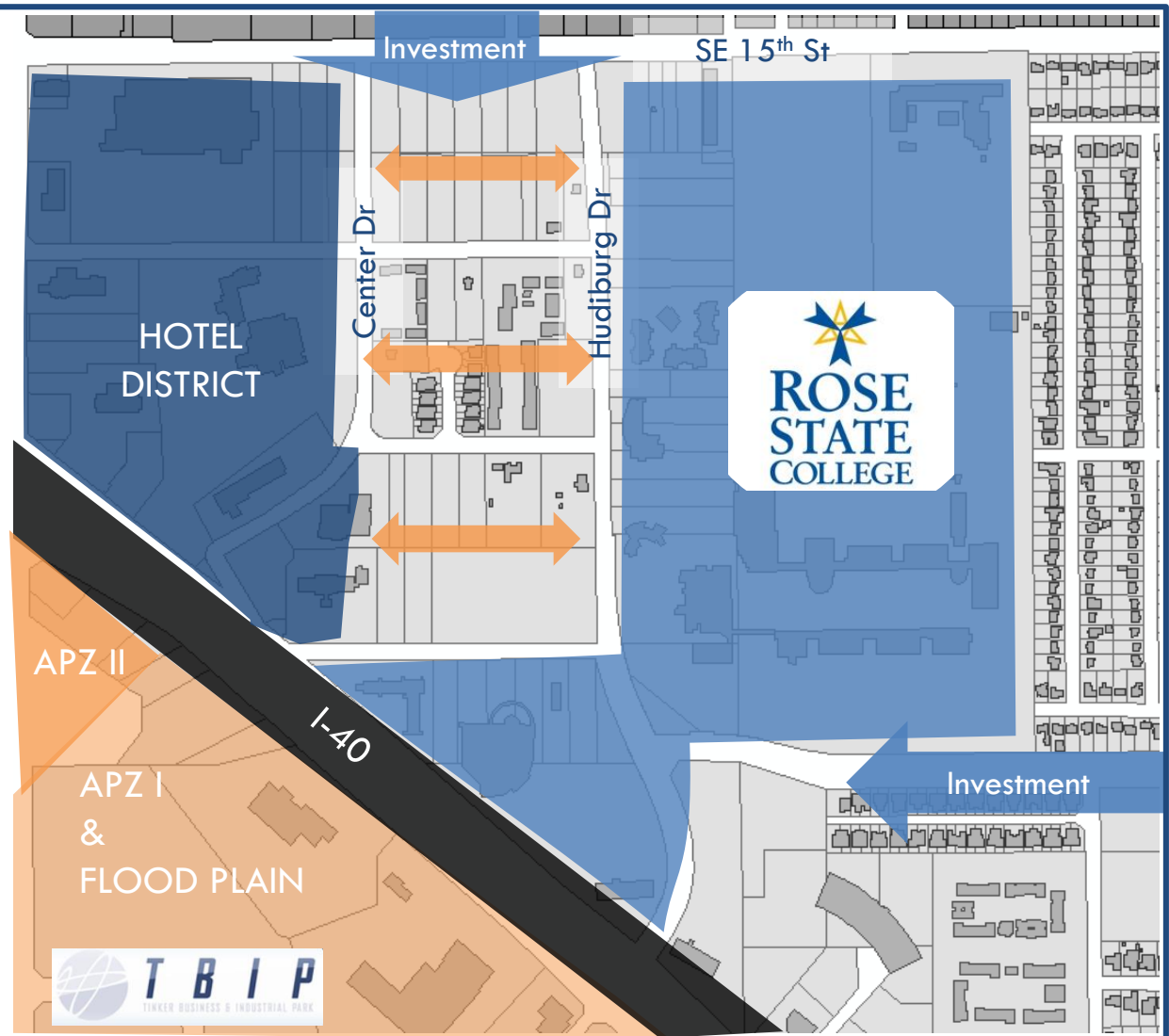


Market Opportunities



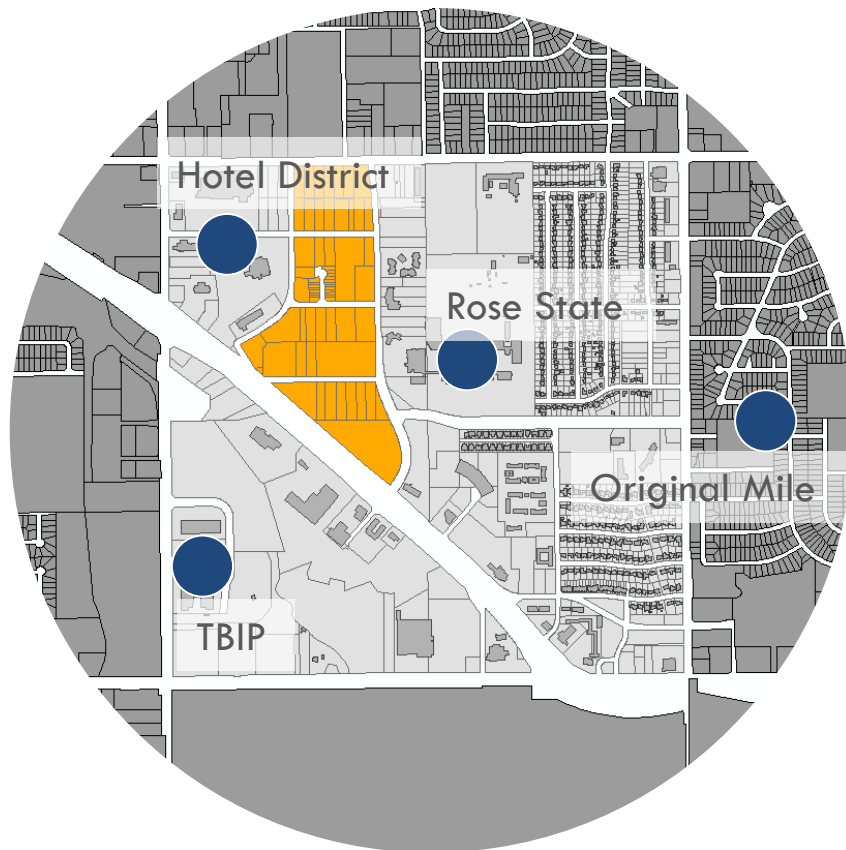
Physical Conditions Analysis Key Findings

- Physical barriers and development constraints such as the APZ, the floodplain, and I-40 located in the southwest corner of the District, **prioritize development in the northern portion of the District.**
- Existing assets** like Rose State, TBIP, and the Hotel District, in addition to **future investments** in the Original Mile and Sooner Rose Center point to an area that is best aligned for initial development.



Physical Conditions Analysis Key Findings

Recommended Priority Area for Innovation District Investment



Focal point between existing activity nodes

Few physical barriers to development

Institutional land ownership

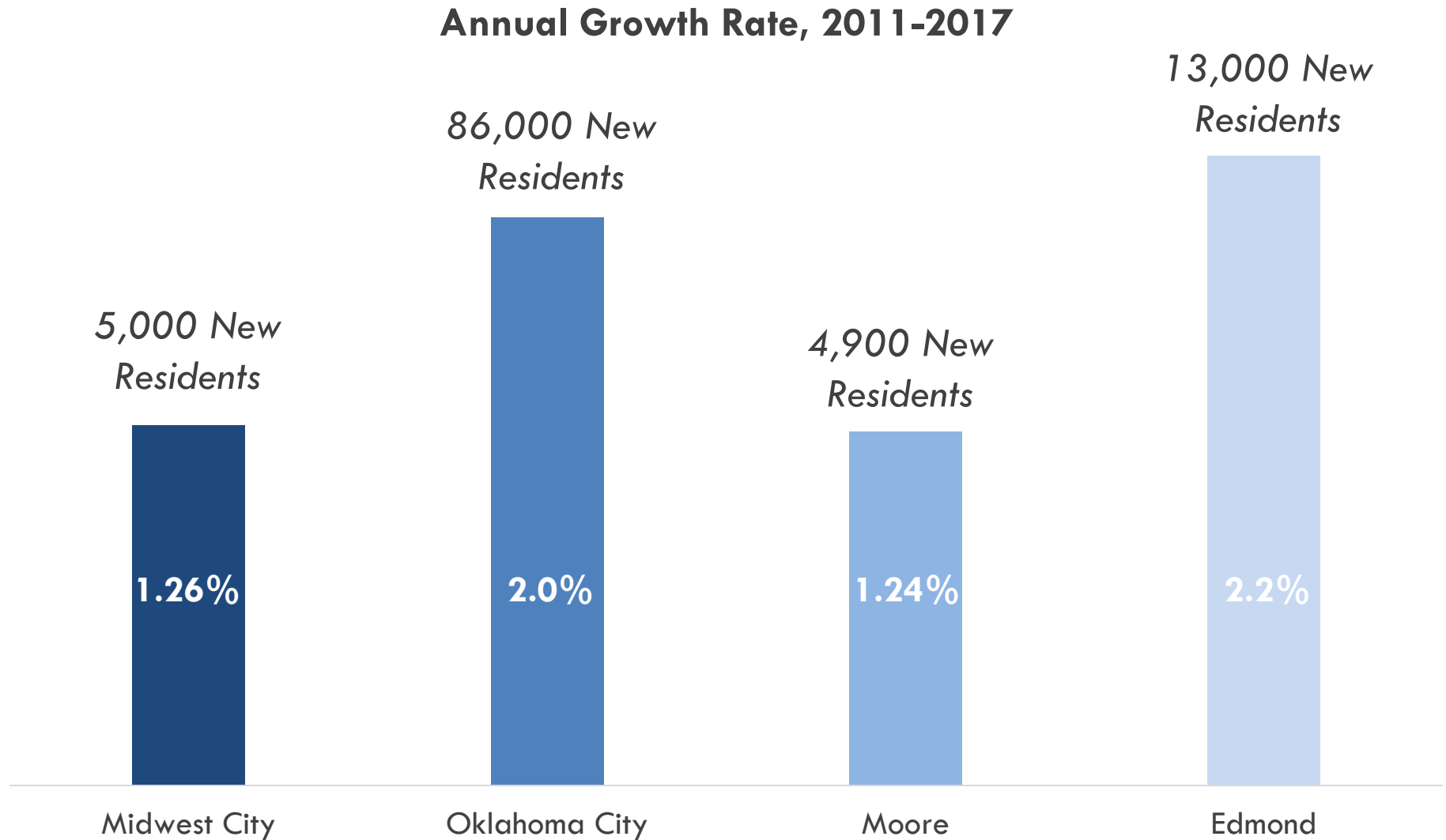
Strong street grid

Physical Conditions Analysis Key Findings

Potential Market-Supportable Programs			
	Lower Density	Higher Density	
<p>Short-Term</p> <p>Long-Term</p>	Innovation Center	Yes	Yes
	Residential	100–200 Units	200–500 Units
	Retail	2,000–3,000 SF	5,000–10,000 SF
	Flex Office	10,000–20,000 SF	30,000–50,000 SF
	Built-to-Suit Office	0–50,000 SF	0–50,000 SF
	Hotel	0 SF	0–50,000 SF

Socioeconomic Context

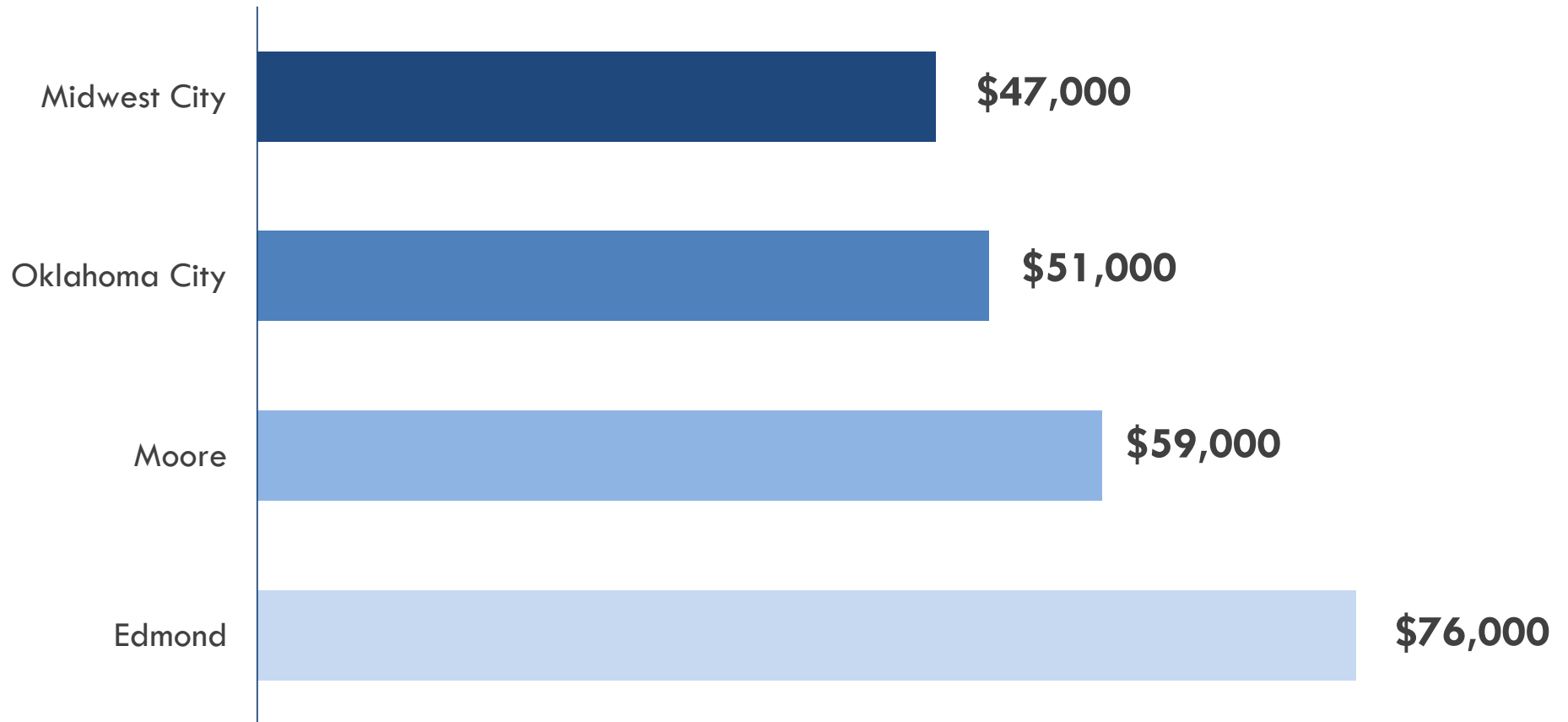
The region has seen slow population growth, with Midwest City slightly lagging behind Oklahoma City and Edmond.



Source: ESRI

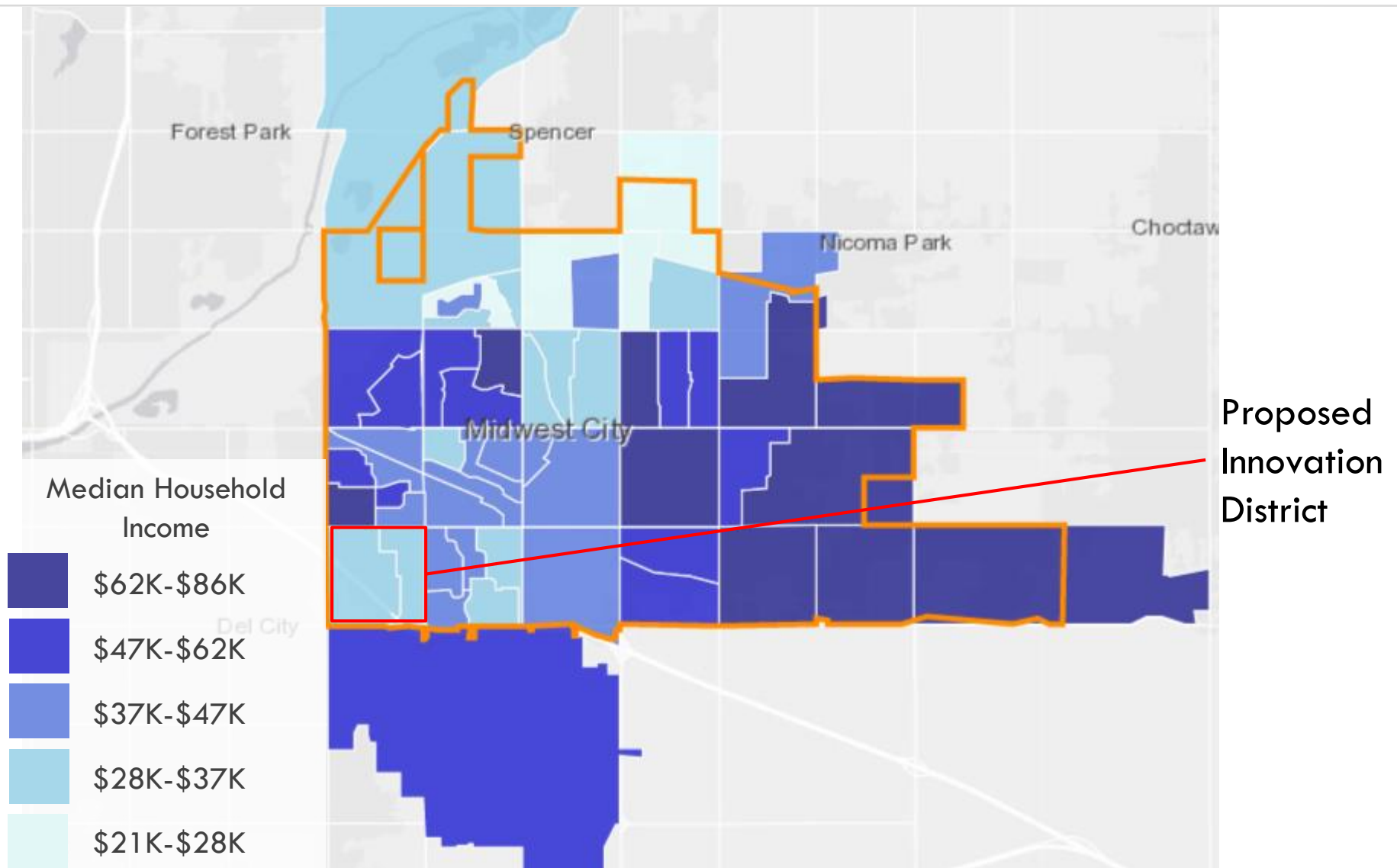
Median household incomes in Midwest City are lower than peer cities in the region.

Median Household Income, 2017



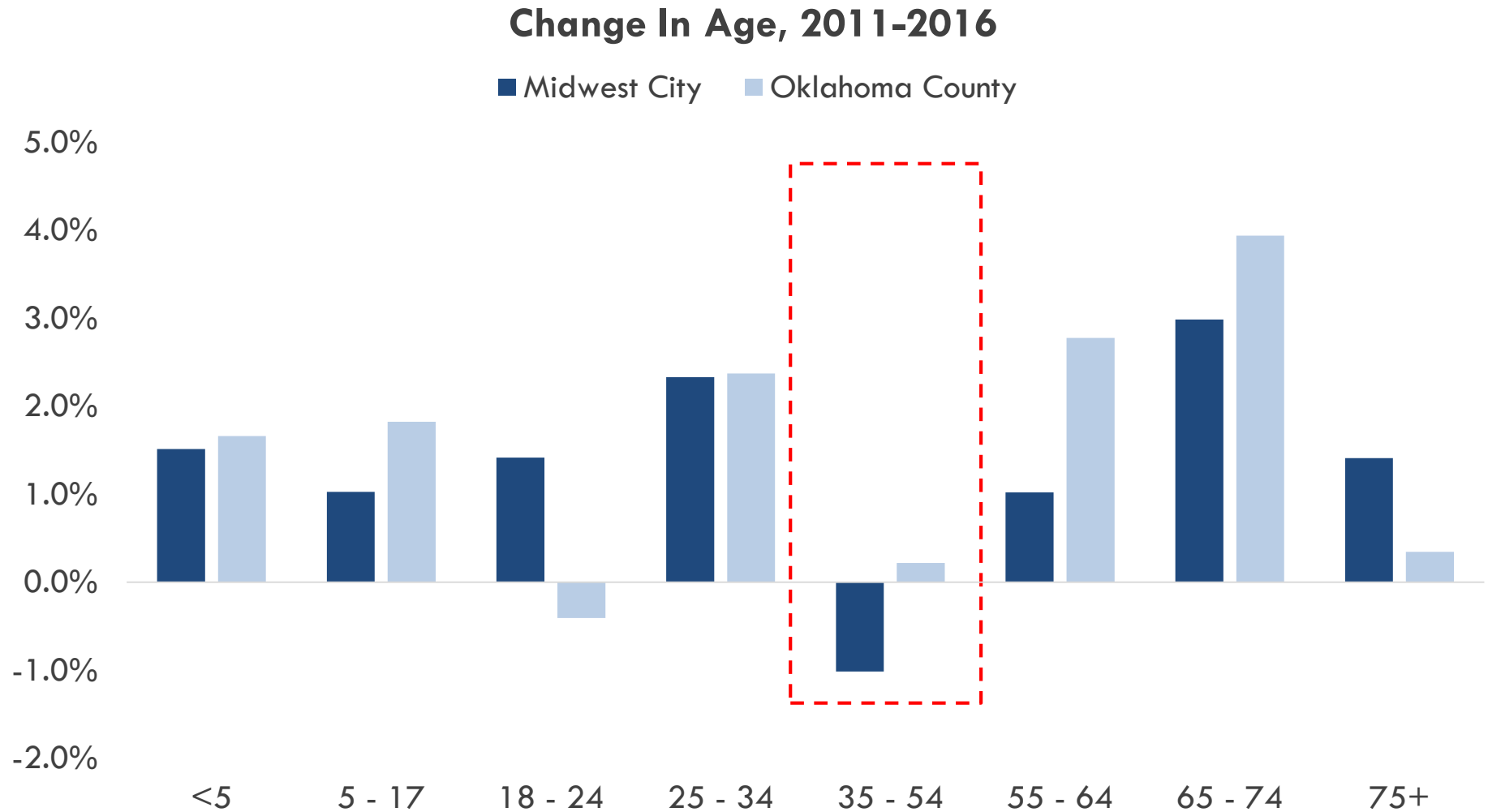
Source: ESRI

Incomes are highest in the eastern part of Midwest City; incomes in the proposed Innovation District have some of the lowest incomes in the City.



Source: ESRI, Zillow

Compared to Oklahoma County, Midwest City has attracted more young adults, but is losing an adult population with the greatest earning potential.

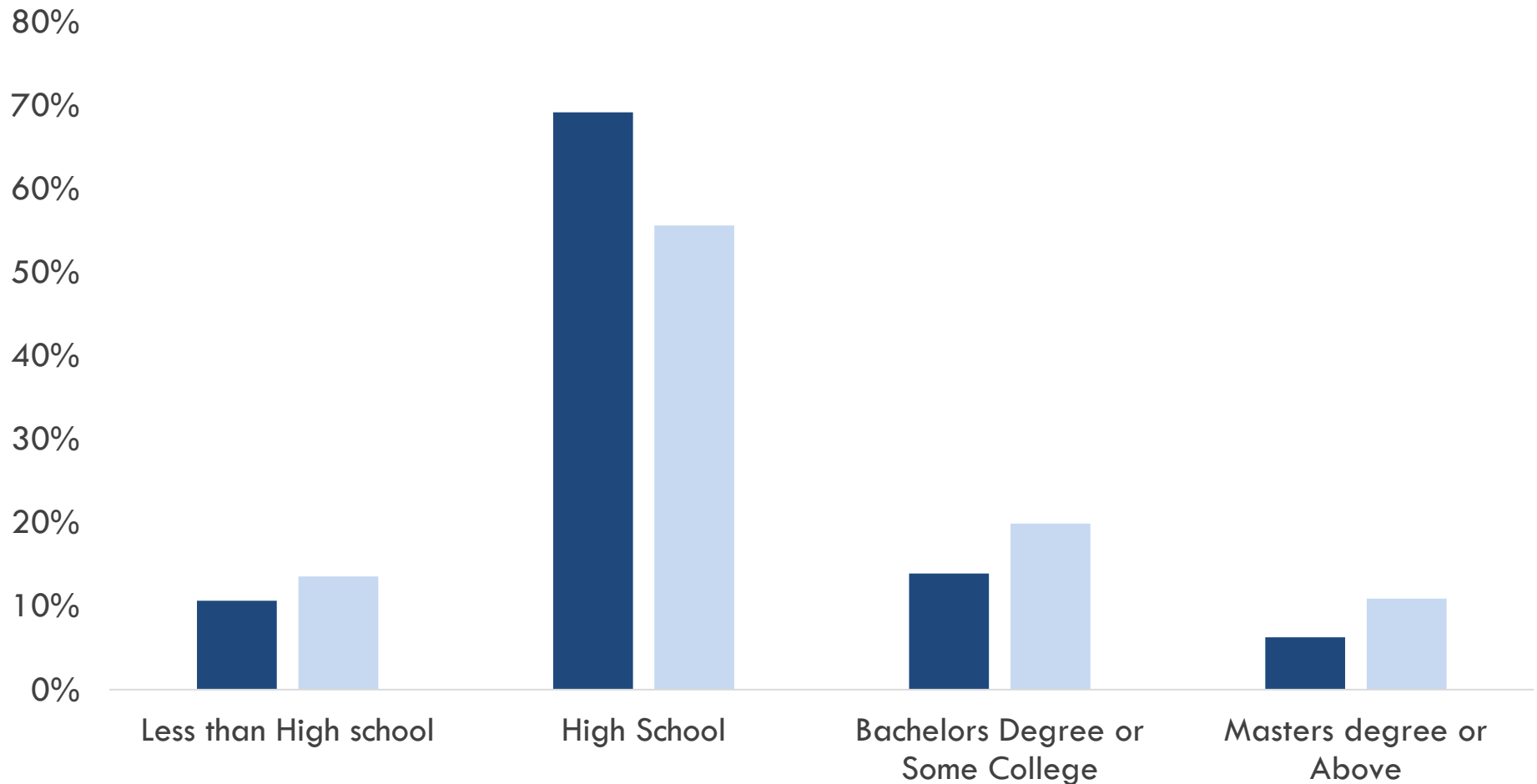


Source: U.S. Census

Although Midwest City has fewer residents with Bachelors or Masters degrees compared to the County, high school graduates exceed County rates.

Highest Educational Attainment

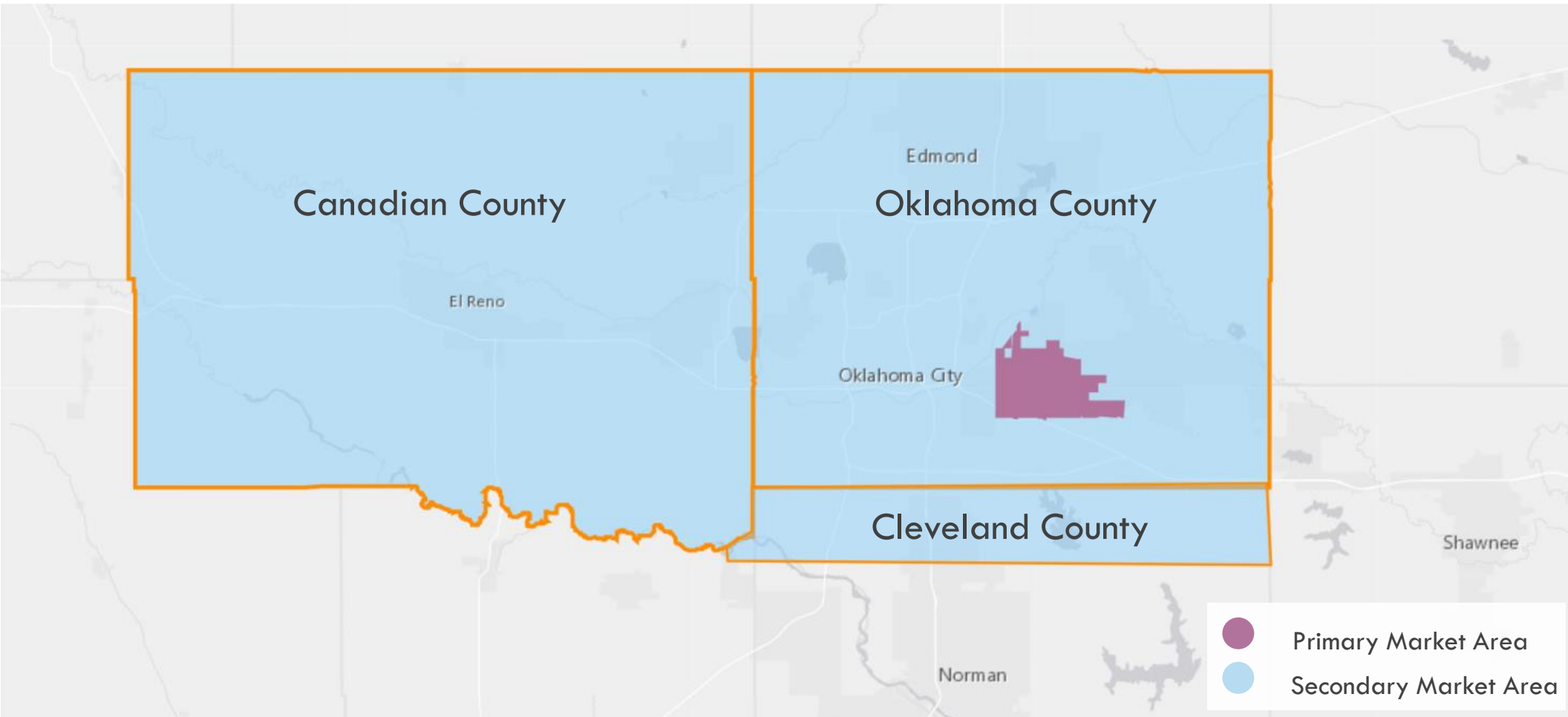
■ Midwest City ■ Oklahoma County



Source: U.S. Census Bureau

Market Scan: Residential

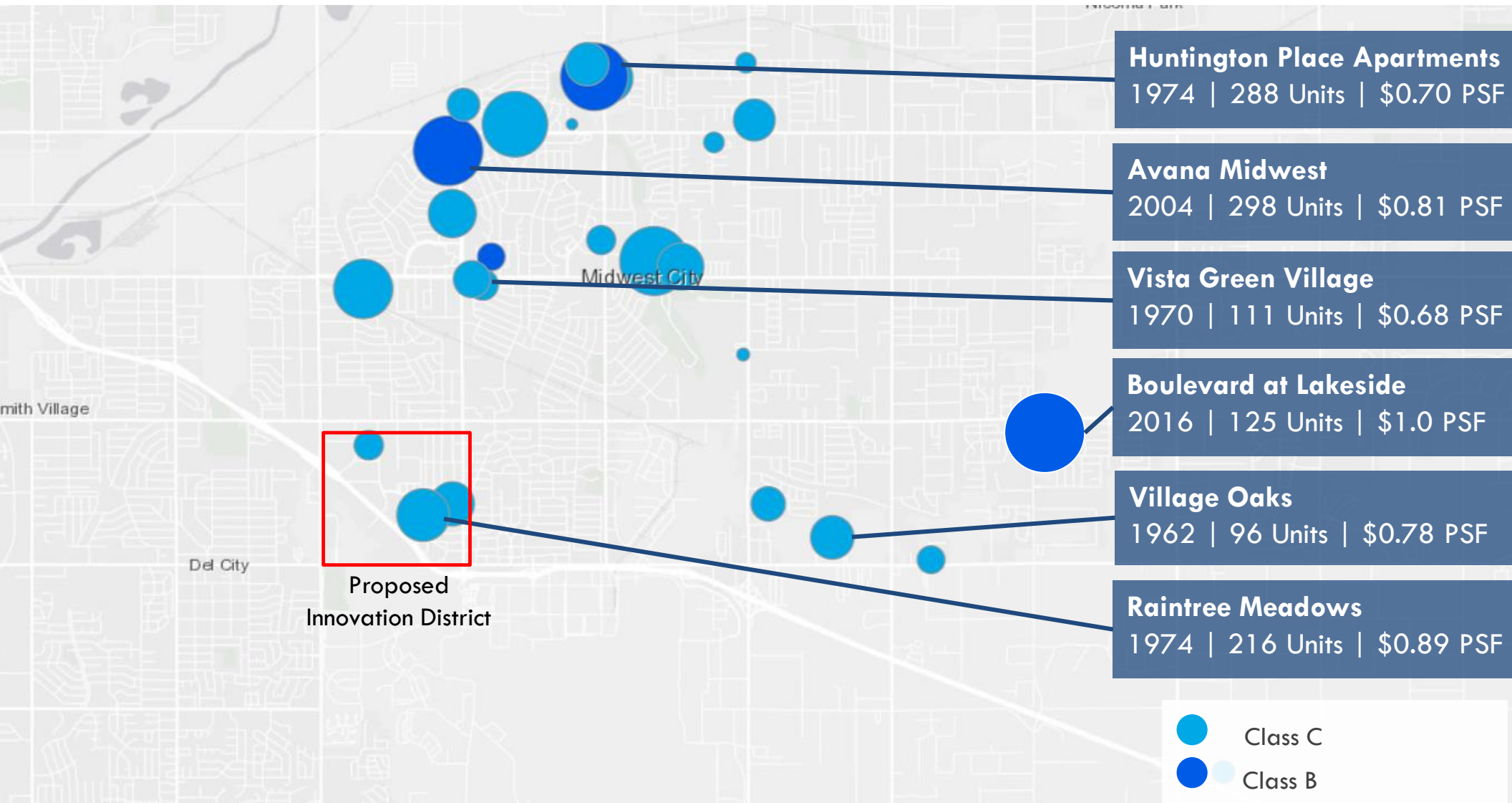
In addition to Midwest City, the residential study area includes a Secondary Market Area consisting of Oklahoma, Canadian, and parts of Cleveland County.



*Norman and the southern portion of Cleveland County were excluded from this analysis as its residential market is uniquely driven by University of Oklahoma, which increases demand for multifamily residential.

Source: ESRI

Multifamily residential in the City is entirely Class B and C product. The Boulevard at Lakeside is the only multifamily development delivered since 2004.



Source: CoStar

Multifamily developments in Midwest City are primary low-rise, garden apartments.

Class B



Boulevard at Lakeside
2016 | 125 Units | \$1.0 PSF



Avana Midwest
2004 | 298 Units | \$0.81 PSF



Huntington Place Apartments
1974 | 288 Units | \$0.70 PSF

Class C



Raintree Meadows
1974 | 216 Units | \$0.89 PSF



Vista Green Village
1970 | 111 Units | \$0.68 PSF

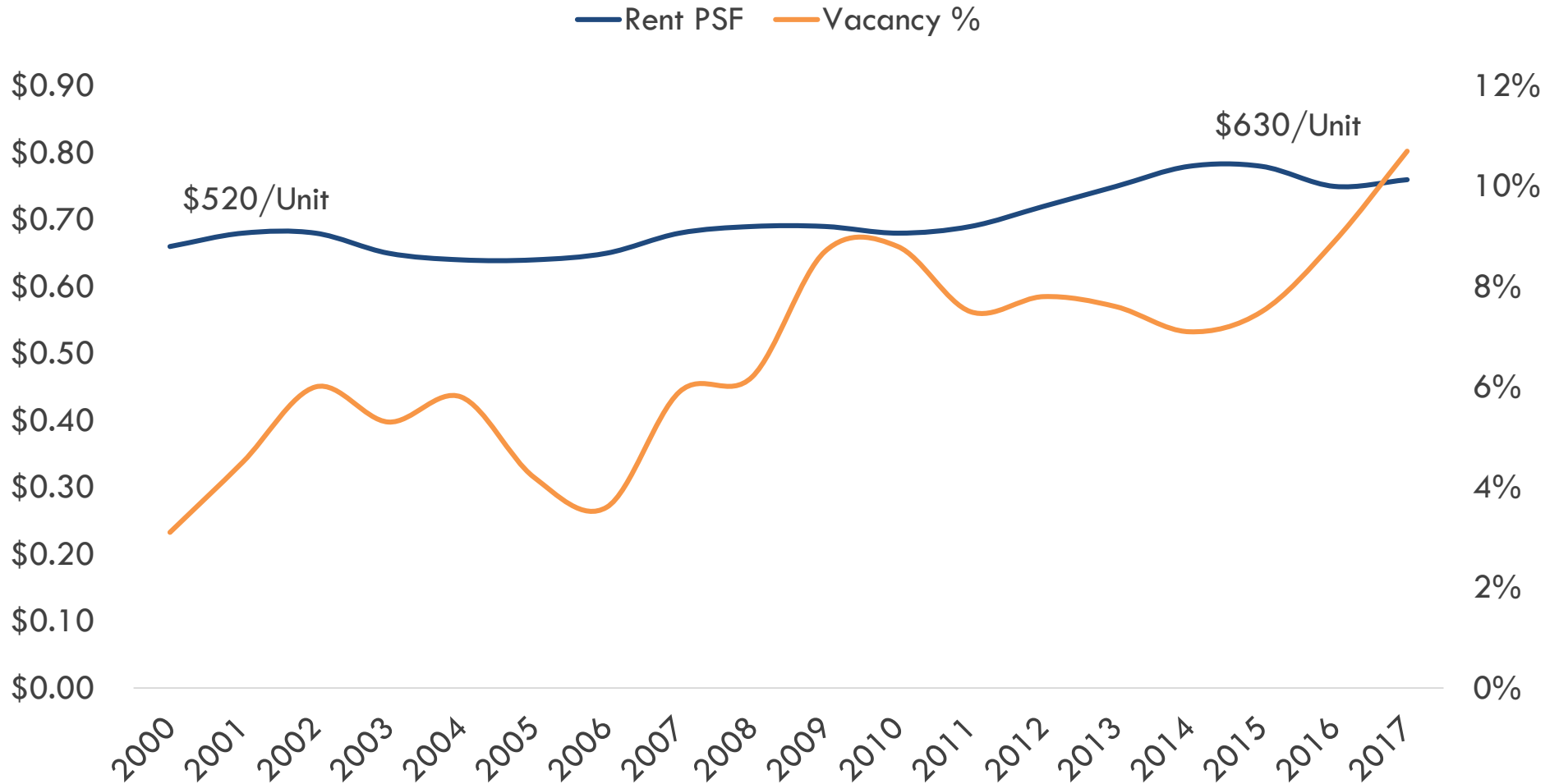


Parkview Apartments
1975 | 294 Units | \$0.64 PSF

Source: CoStar

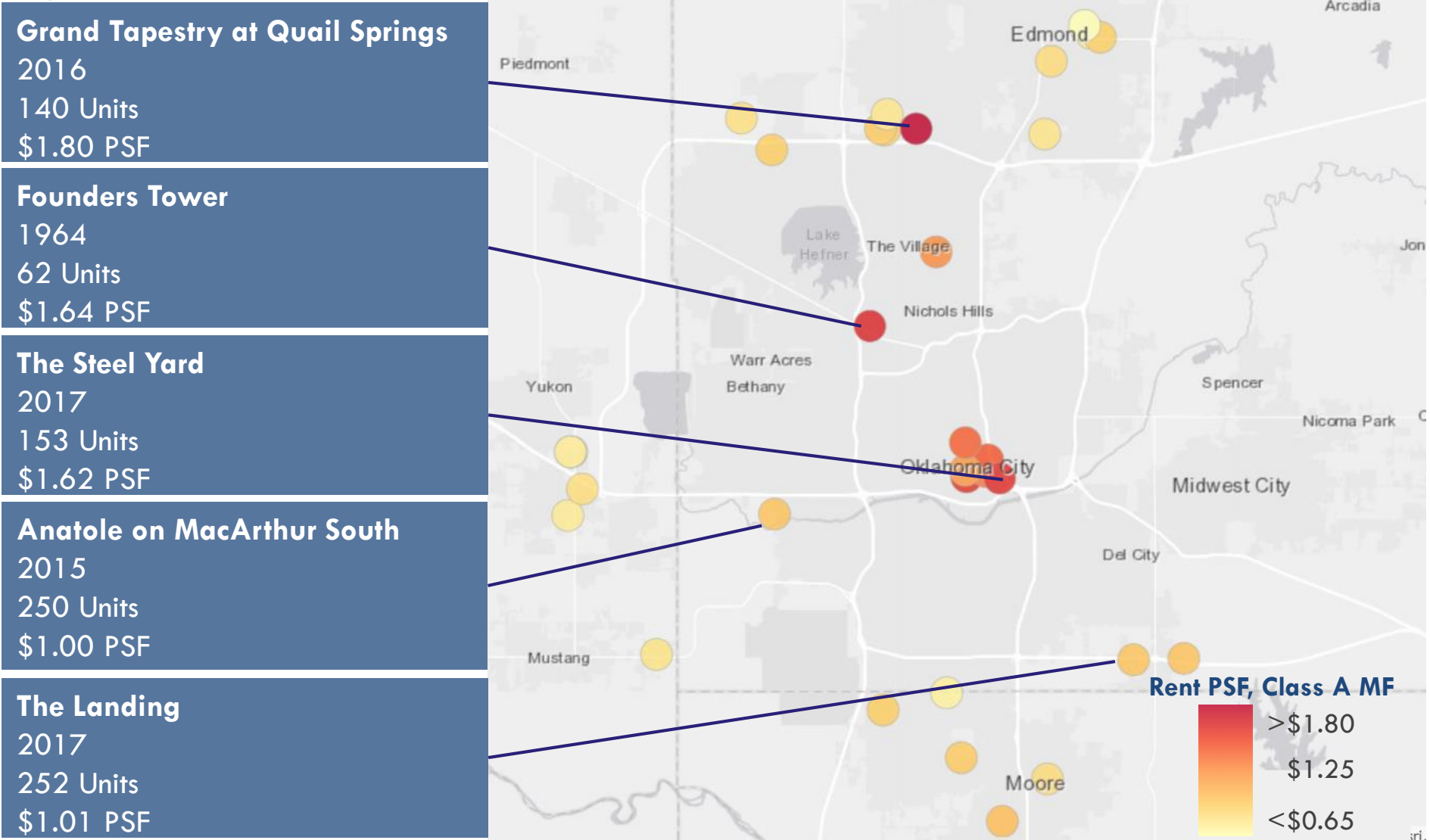
Multifamily rents in Midwest City have been stagnant since 2000, with vacancy rates climbing to over 10%.

Midwest City Multifamily Rents and Vacancy



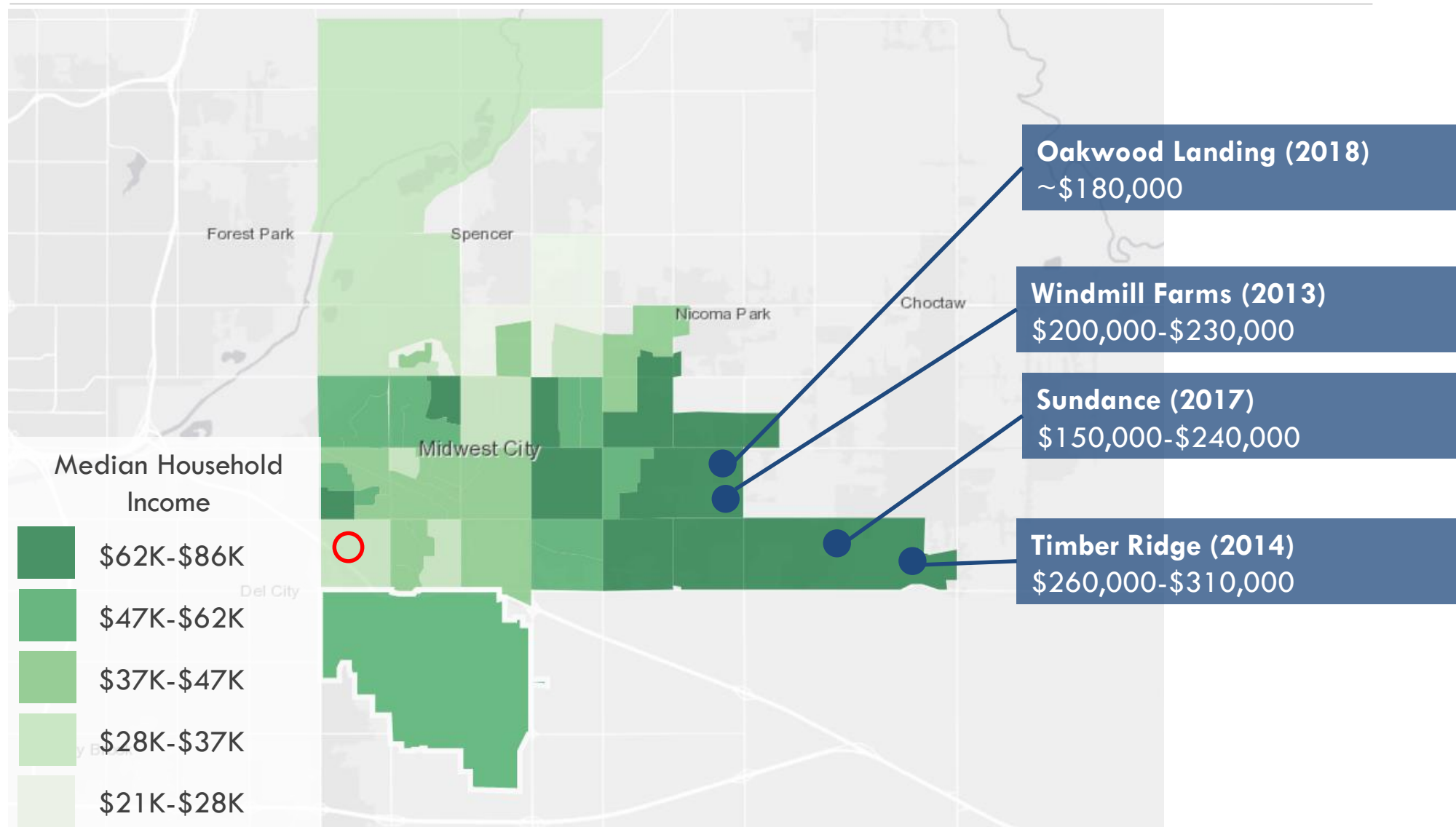
Source: CoStar

Across the Secondary Market Area, Class A rents south of Downtown OKC are ~\$1 PSF. Rents in unique products in and around Downtown OKC earn much higher rents of \$1.60-\$1.80.



Source: CoStar

Single family home construction has been concentrated in eastern Midwest City, where incomes are highest.



Source: ESRI, Zillow

Single family homes in the proposed Innovation District are few in number and have lower tax valuations relative to the surrounding city.

**Total Single
Family Homes**



**Average Tax
Valuation**



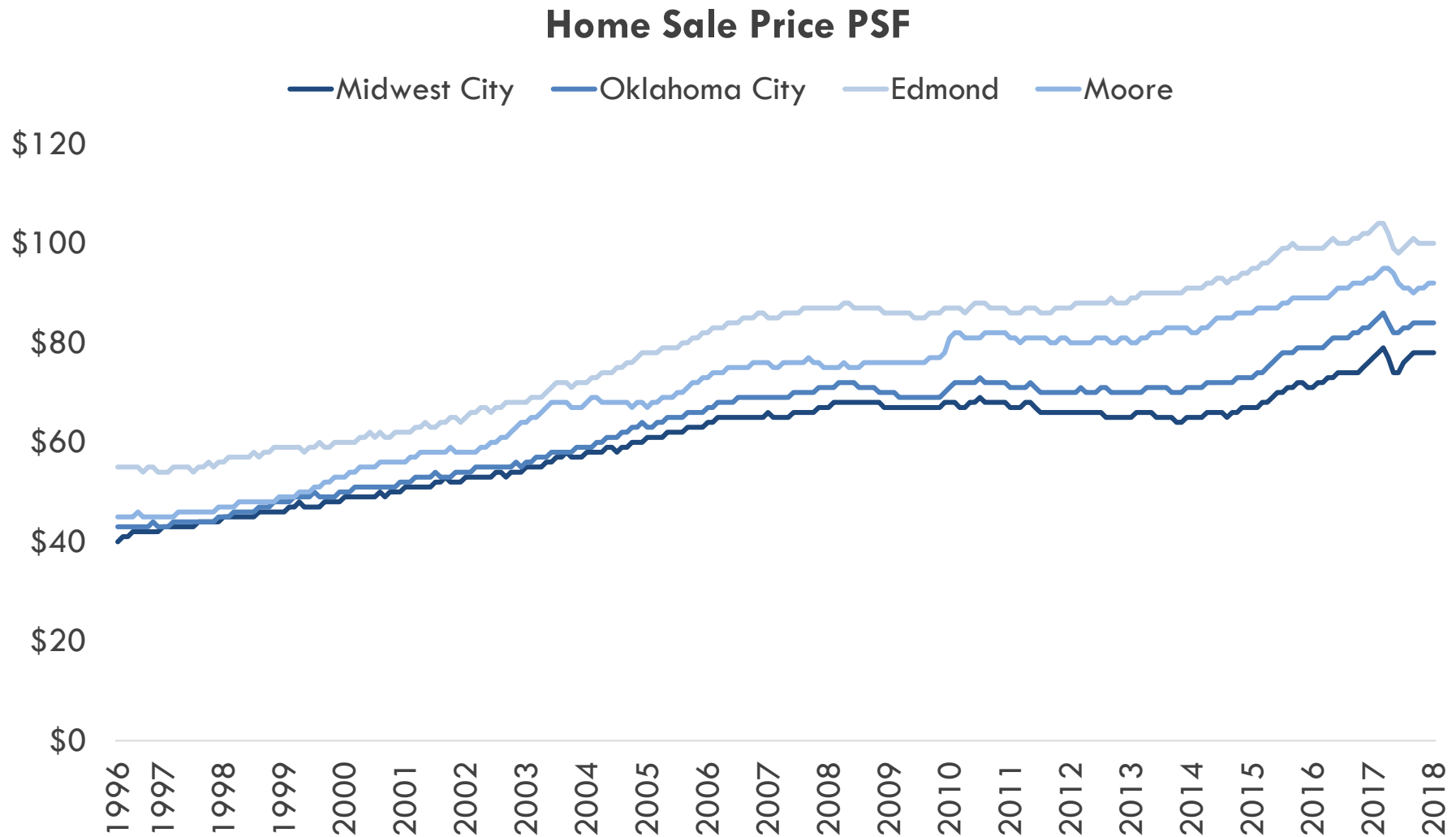
**Area Median
Income**



- The proposed Innovation District area contains 570 single family residential homes, **making up just 2% of the total housing stock** in Midwest City
- At \$32,000, the **area's median income is 32% lower** than the household median income for the rest of the city

Source: ESRI, Midwest City Municipal Tax Valuation

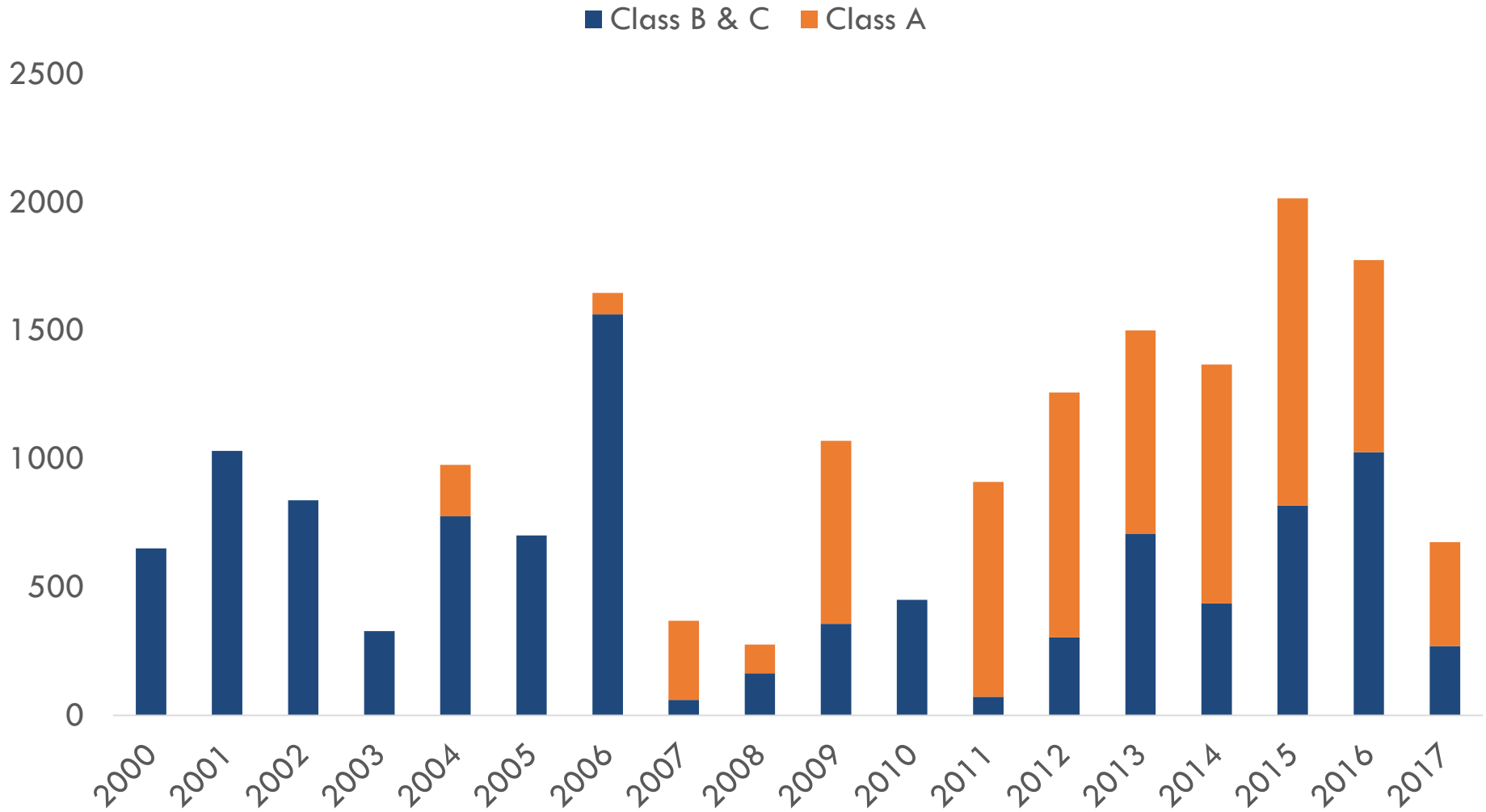
Single family home prices in Midwest City have been consistently lower than Oklahoma City and other cities in Oklahoma and Cleveland Counties.



Source: Zillow

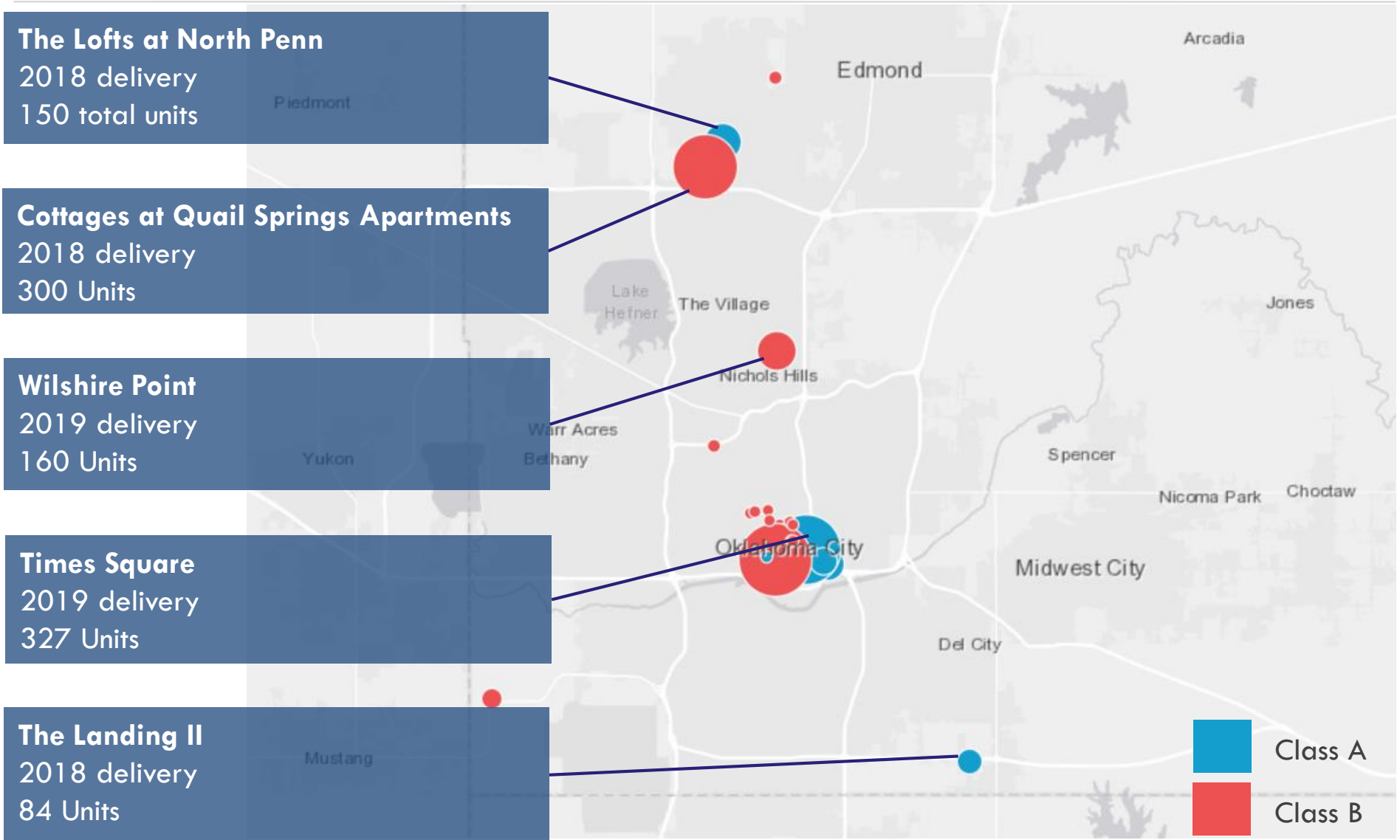
Class A multifamily has increasingly been the majority of new deliveries in the Secondary Market, potentially signaling demand for amenitized developments.

Secondary Market Multifamily Deliveries



Source: CoStar

New multifamily development in the Secondary Market Area is concentrated in Downtown OKC and north Oklahoma County.



Source: CoStar

HR&A developed a residential demand model to identify the capacity to absorb new residential product in the proposed Innovation District.

Catchment Area: Secondary Market

- Assumed **average rents of \$900 for new rental apartments**, and an **average sales price of \$150,000 for new for-sale product**



Eligible Households

- **Meet income requirements** for new multifamily housing
- Moved within the **past year**
- Are **renters** (for apartment analysis) or **owners** (for for-sale analysis)



Capture Rate

- **Assess the portion of the market a new development would need to capture in order to lease up** in a reasonable timeframe of one year



High rental and turnover rates among the 25-34 cohort drives residential potential in Midwest City.

For Rent Demand (\$900 average rent per unit)					
Age of Householder	Household Income \$34K +	Portion Renting	Turnover Rate	Households "In the Market" for a Rental Unit	
<25	1,426	82%	19%	112	
25-34	4,437	57%	31%	553	
35-44	3,971	48%	17%	246	
45-64	8,536	36%	14%	309	
65+	6,167	27%	10%	112	
Total	24,537			1,331	

Source: U.S. Census, Costar, ESRI

Midwest City's mid-career cohort population is contributing nearly a third of the total demand of for-sale residential products.

For Sale Demand (\$150,000 average sale price per unit)					
Age of Householder	Household Income \$33K +	Portion Owning	Turnover Rate	Households "In the Market" for a For Sale Unit	
<25	726	18%	19%	25	
25-34	3,103	43%	31%	424	
35-44	2,980	52%	17%	268	
45-64	6,359	64%	14%	561	
65+	3,963	73%	10%	296	
Total	10,471			1,573	

Source: U.S. Census, Costar, ESRI

Midwest City could reasonably absorb 600 units by 2028, with mix of rental and for-sale product.

Demand Projection to 2028

Total Residential Demand-Midwest City	For Rent	For Sale	Total Demand
Total Residential Demand (1% annual growth, 2018-2028)	15,500	18,300	33,800

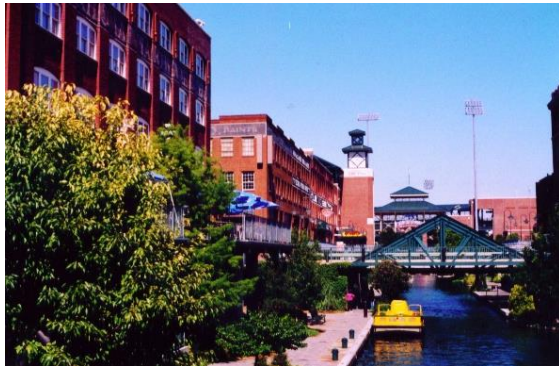
10-Year
Supportable
Residential Units

500-700 Units

Source: U.S. Census, Costar, ESRI

In the region, premium Class A residential developments are accompanied by neighborhood amenities, such as local retail and restaurants.

BRICKTOWN



- Popular entertainment district attract millennials, including active military residents.
- Rents are some of the highest in the market, reaching **\$1.62 PSF** for new development.

CHISOLM CREEK



- New multifamily development in OKC is occurring around a mixed-use neighborhood far from Downtown.
- High rents at **\$1.45 PSF** reflect the demand for multifamily residential outside of downtown environments.

Source: CoStar

Residential Findings

No new deliveries of multifamily housing have occurred in or around Midwest City.



Developers may have interest in small residential deliveries to test the Midwest City market.

New Class A residential buildings are locating around amenitized, mixed-use districts.



A mix of uses that offers residents convenience and activity can support new residential development.

High rates of renters and high turn over drive residential demand in Midwest City.



Midwest City could support 500 to 700 units by 2028 in 150 to 200 unit developments.

Market Scan: Office

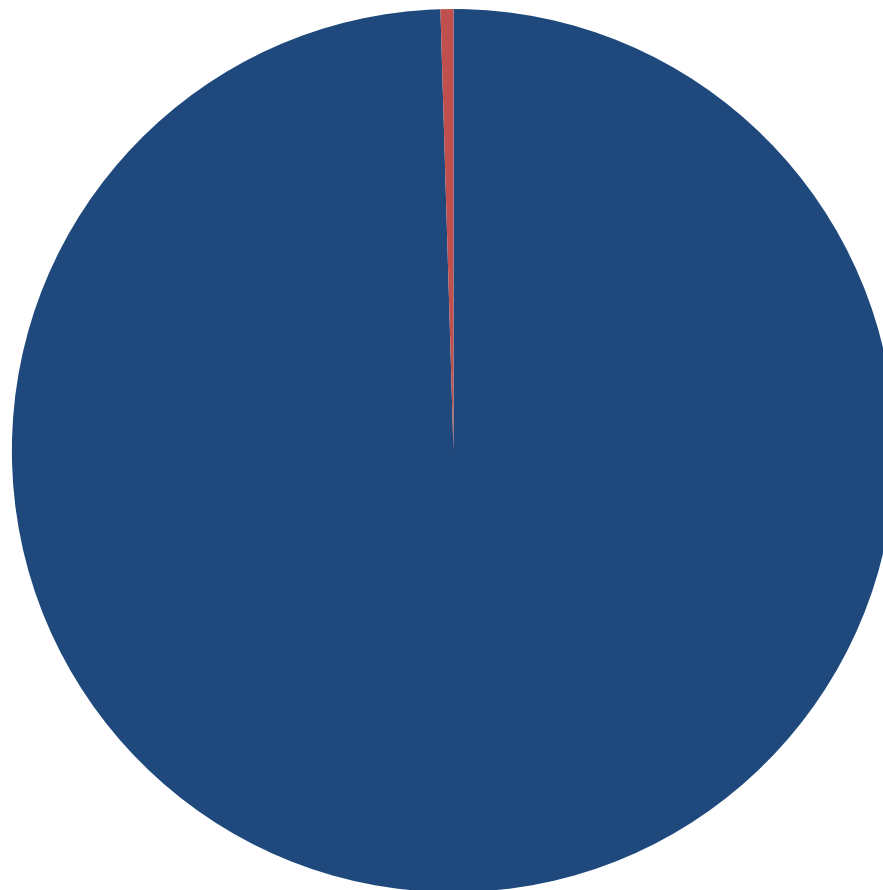
The Midwest City office market encompasses Oklahoma and Cleveland Counties, including Edmond, Moore, and Norman.



The Midwest City office market has been and remains a minor share of the region with low-quality Class B and C product and no Class A product.

OFFICE MARKET INVENTORY, ALL CLASSES

■ Secondary Market ■ Midwest City



Midwest City:

Supply: 370,000 SF

Average Rent: \$13/PSF

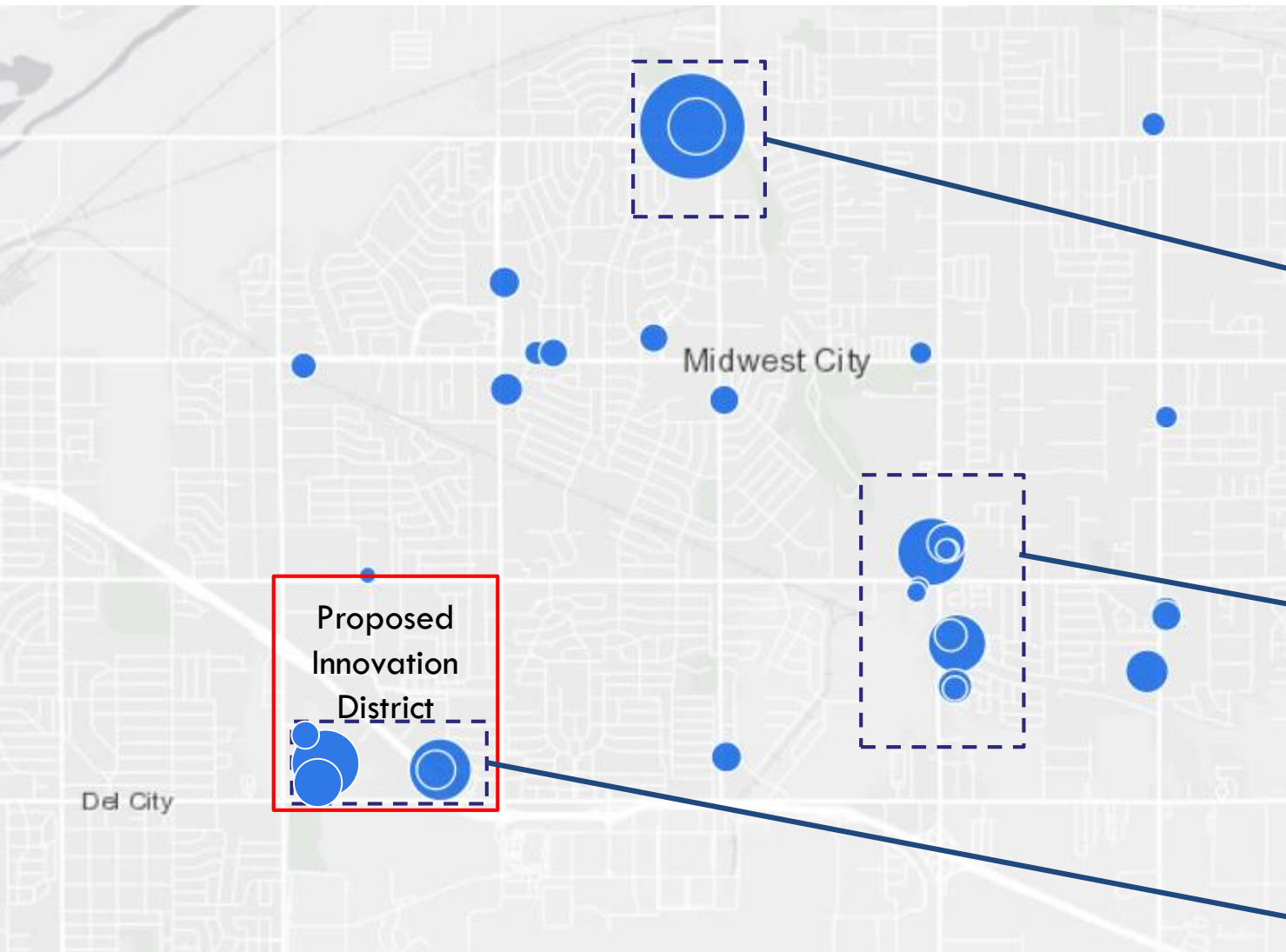
Secondary Market Area:

Supply: 50,000,000 SF

Average Rent: \$17/PSF

Source: CoStar

Most of the office product in Midwest City is aging, lower quality space. The highest rents and largest office clusters are found along S. Douglas Boulevard.



Midwest Office Park
75K SF | 11% Vacant | \$11 PSF



S Douglas Boulevard
200K SF | 16% Vacant | \$15 PSF



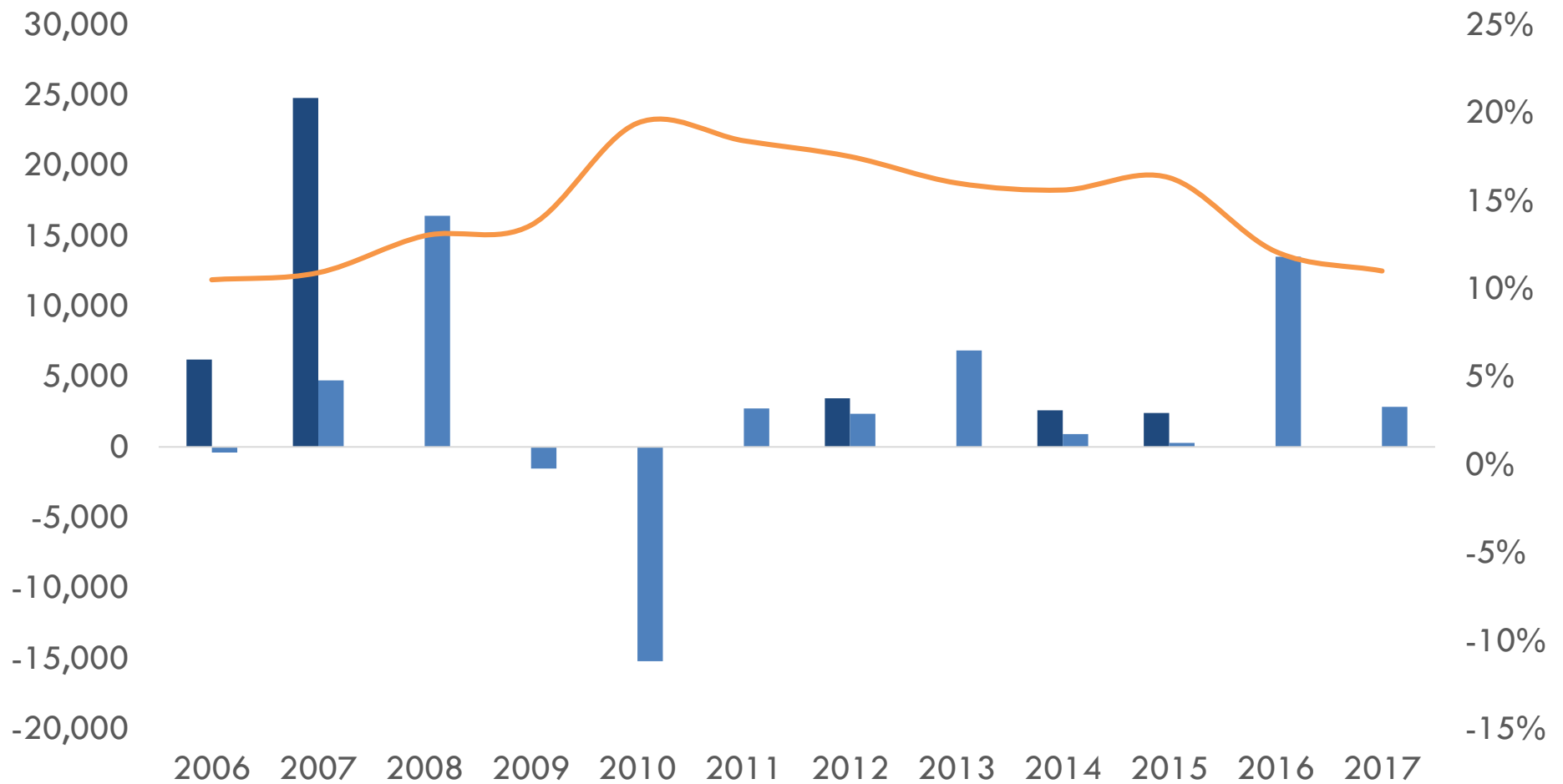
Tinker Diagonal
60K SF | <1% Vacant | \$11 PSF

Source: CoStar

In Midwest City, the limited size of the market has left it open to spikes in vacancies even when small companies leave.

Midwest City Office Trends, All Classes

Deliveries SF Net Absorption SF Vacancy



Source: CoStar

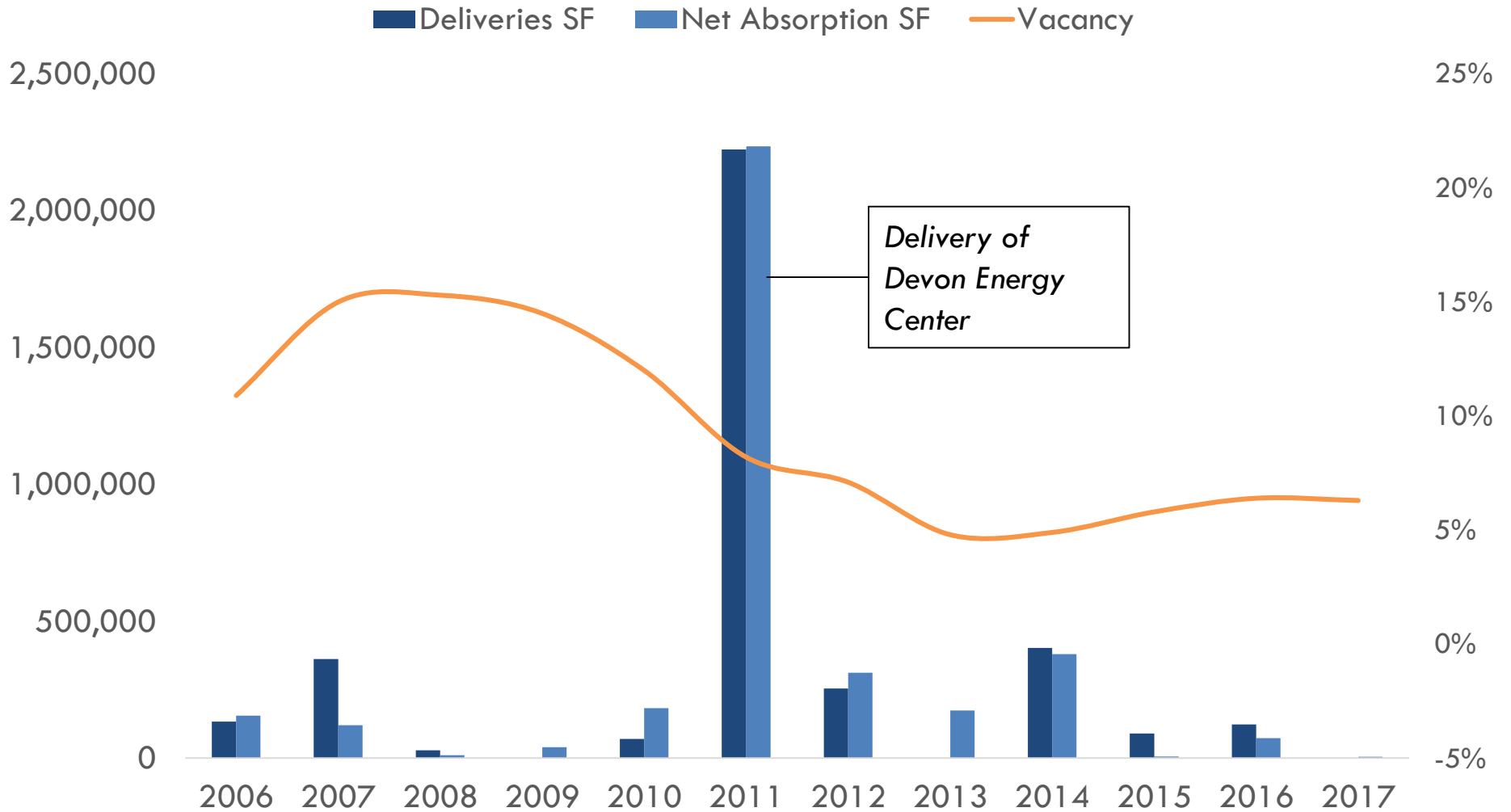
Apart from healthcare, office-occupying industries are small and have grown slowly in Midwest City, limiting new deliveries.

Office-Occupying Industries, Midwest City	2017 Jobs	2027 Jobs	New Jobs
Health Care and Social Assistance	3,004	3,399	395
Real Estate and Rental and Leasing	659	528	-131
Finance and Insurance	581	602	21
Professional, Scientific, and Technical Services	525	612	87
Administrative and Support	301	404	103
Information	76	32	-44
Management of Companies and Enterprises	17	30	13
Educational Services	0	15	15
Total	5,164	5,622	459

Source: EMSI

Across the Secondary Market Area, vacancies have fallen as absorption has kept pace with deliveries, showing a stable, but low-activity market.

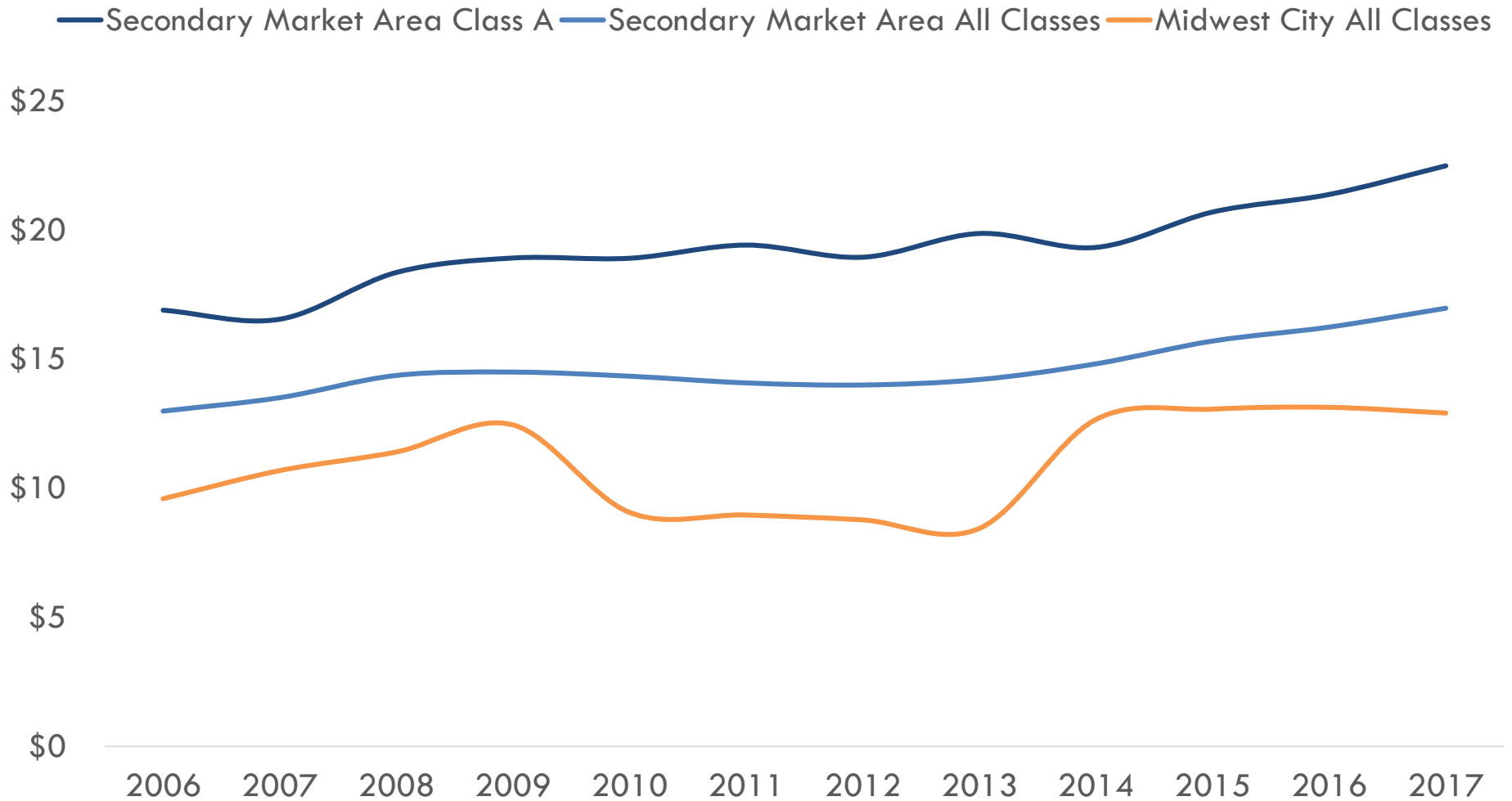
Secondary Market Trends, Class A



Source: CoStar

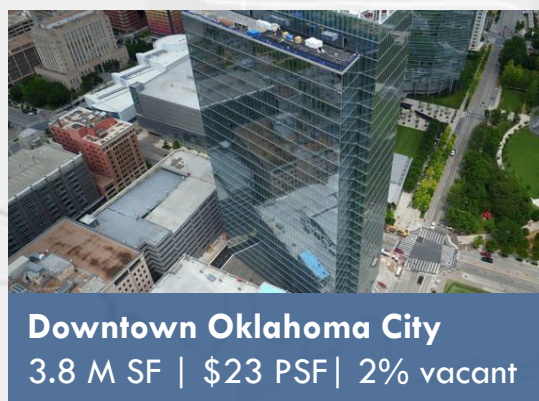
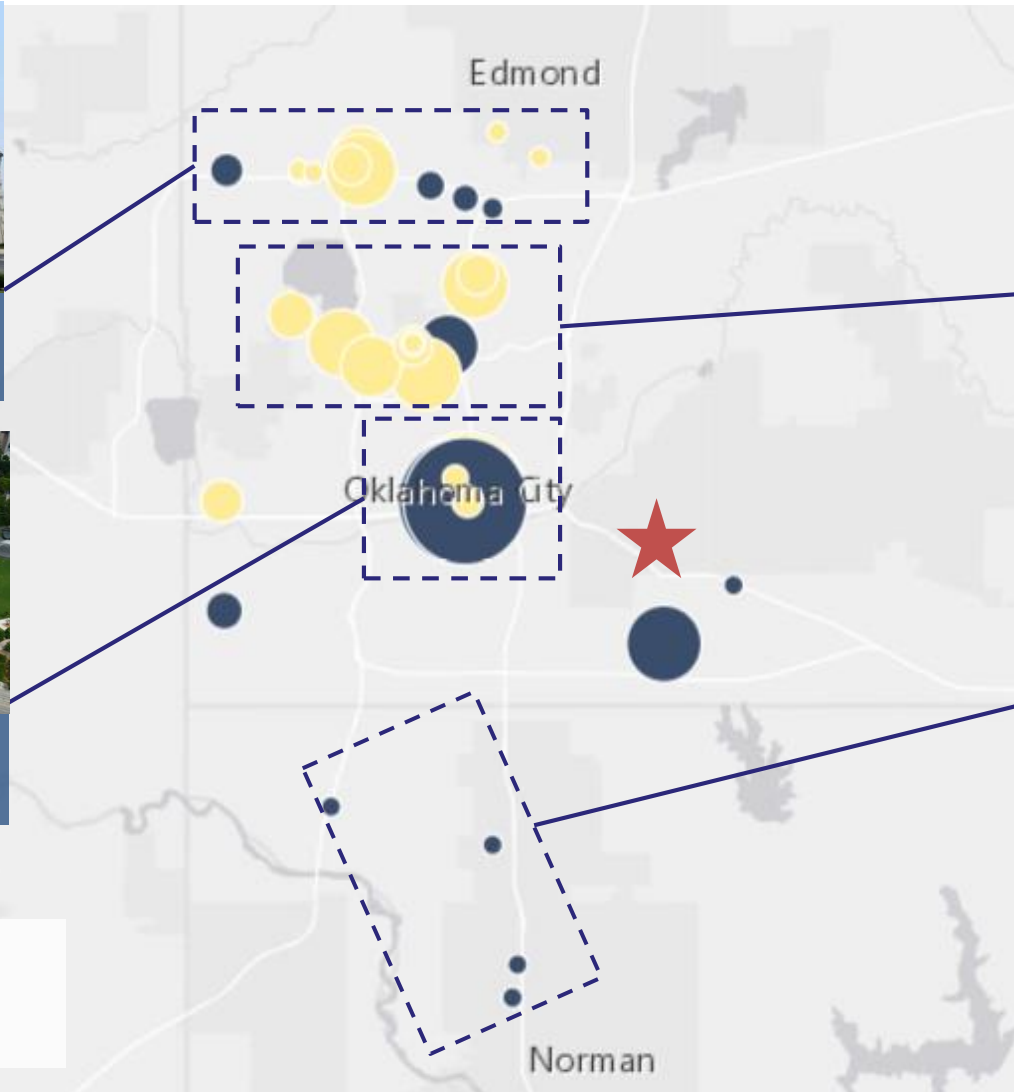
Class A rents in the Secondary Market Area have rebounded from the Great Recession better than other properties, but rents in Midwest City remain flat.

Office Base Rent Trends



Source: CoStar

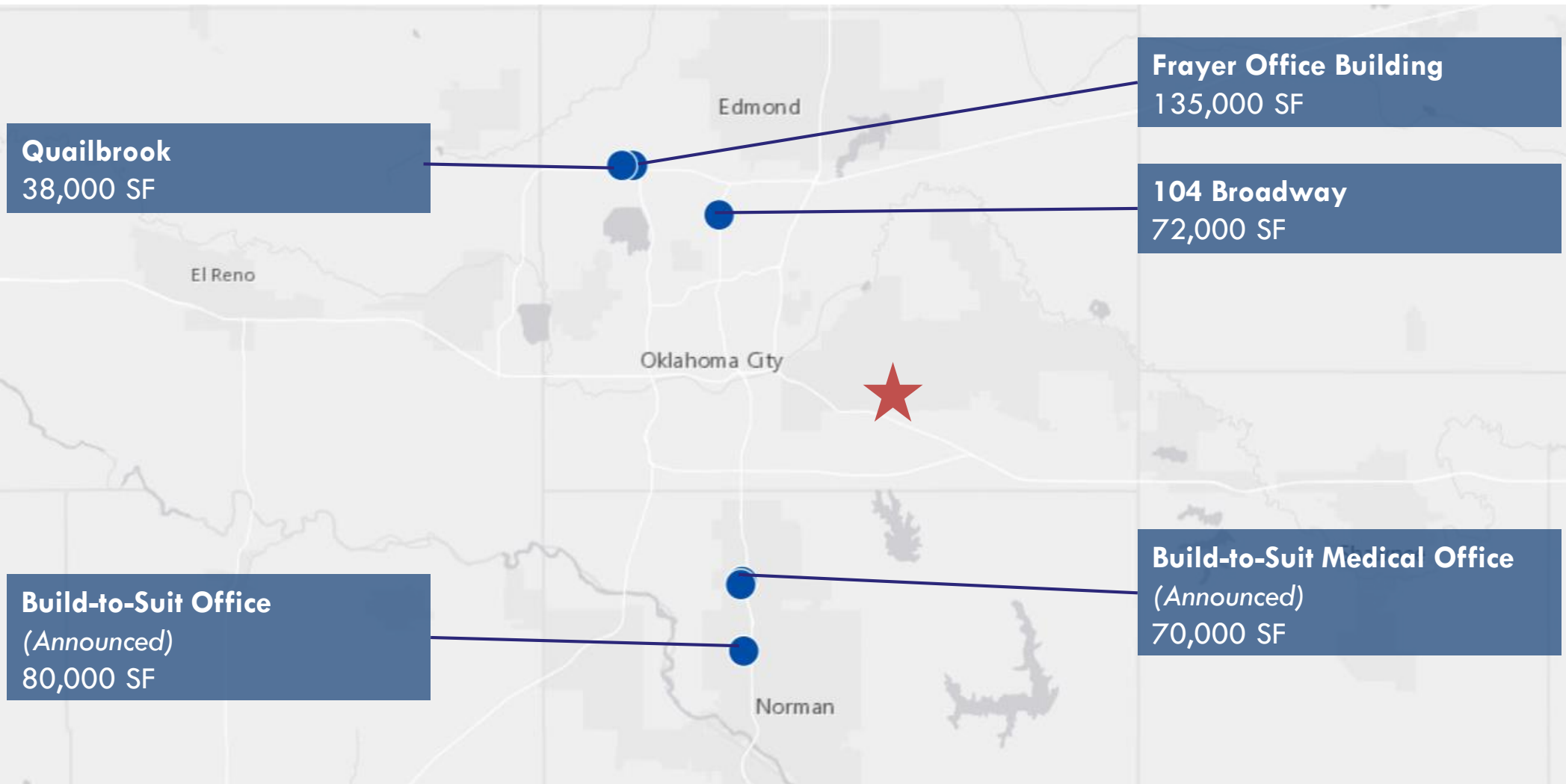
Existing Class A product is concentrated in Downtown OKC and northwest of Oklahoma City. Newer, smaller Class A developments are south of Downtown.



● Pre 2010
● 2010-2016

Source: CoStar

Pipeline office developments are built-to-suit and concentrated in northern Oklahoma County and Cleveland County.



Source: CoStar

Creative coworking spaces have been constructed in Oklahoma City that cater to different industries or startup cultures.



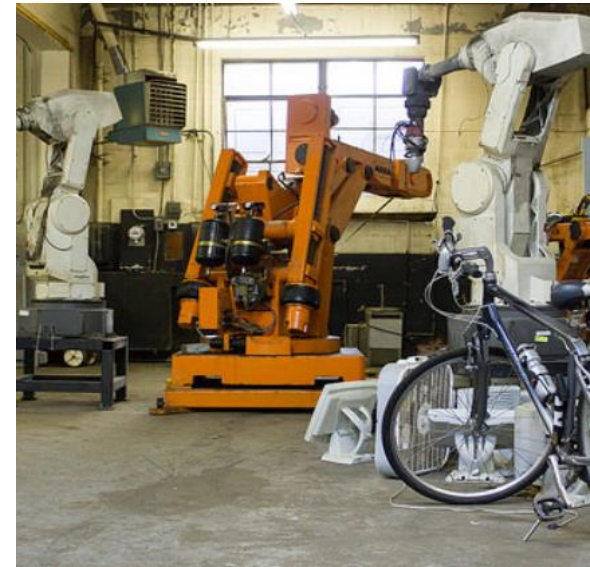
The Barn OKC (2015)

- Renovated Single Family Home
- \$200-\$700/month
- Downtown adjacent



Starspace46 (2016)

- Targeted to tech entrepreneurs
- \$150-\$1,200/month memberships
- Midtown location



ProtoTEK OKC (2013)

- Makerspace that focuses on hands-on prototyping
- \$50/month membership
- Midtown location

Future office demand in the region will be driven by growth in office-occupying industries, likely concentrated in health care and professional jobs.

Office-Occupying Industries, Secondary Market Area	2017 Jobs	2027 Jobs	New Jobs
Health Care & Social Assistance	69,805	79,667	4,931
Administrative & Support	38,181	37,080	-1,101
Professional, Scientific, & Technical Services	34,646	39,576	4,930
Finance & Insurance	22,642	23,949	1,307
Educational Services	10,281	11,698	1,417
Real Estate	9,407	9,046	-361
Management of Companies	9,231	11,711	2,480
Information	8,158	6,600	-1,558
Total	202,351	219,328	12,045

Source: EMSI

Based on estimates of future job growth, 2.3 million additional SF of office could be supported in the Oklahoma City Secondary Market Area by 2027.

New office-supporting jobs in Secondary Market Area by 2027	12,045
Office SF per employee	225
New supportable SF in the Secondary Market Area	2,710,125
New supportable SF in the Secondary Market Area, less pipeline	2,310,000
Annual new supportable SF in the Secondary Market Area from employment growth	231,000

Source: EMSI

Office Findings

Existing office product in Midwest City is aging with no Class A spaces on the market.



The Innovation District could provide flexible office space not found in Midwest City.

Recent office development has relied on built-to-suit tenants.



There is no immediate market for speculative office space in Midwest City.

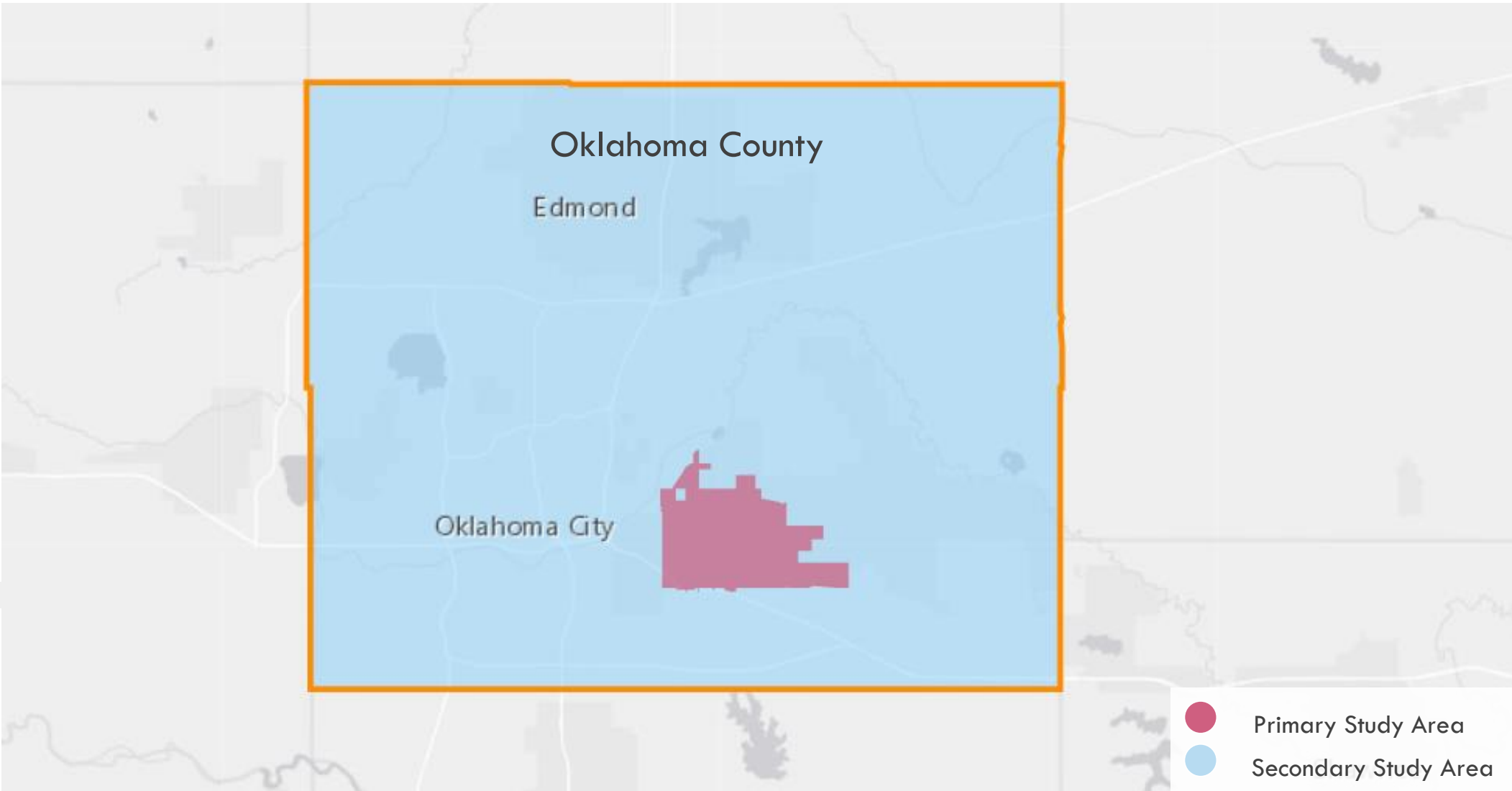
There is limited pipeline demand for office space in the Secondary Market Area.



Office space should be anchored by a key partner or tenant.

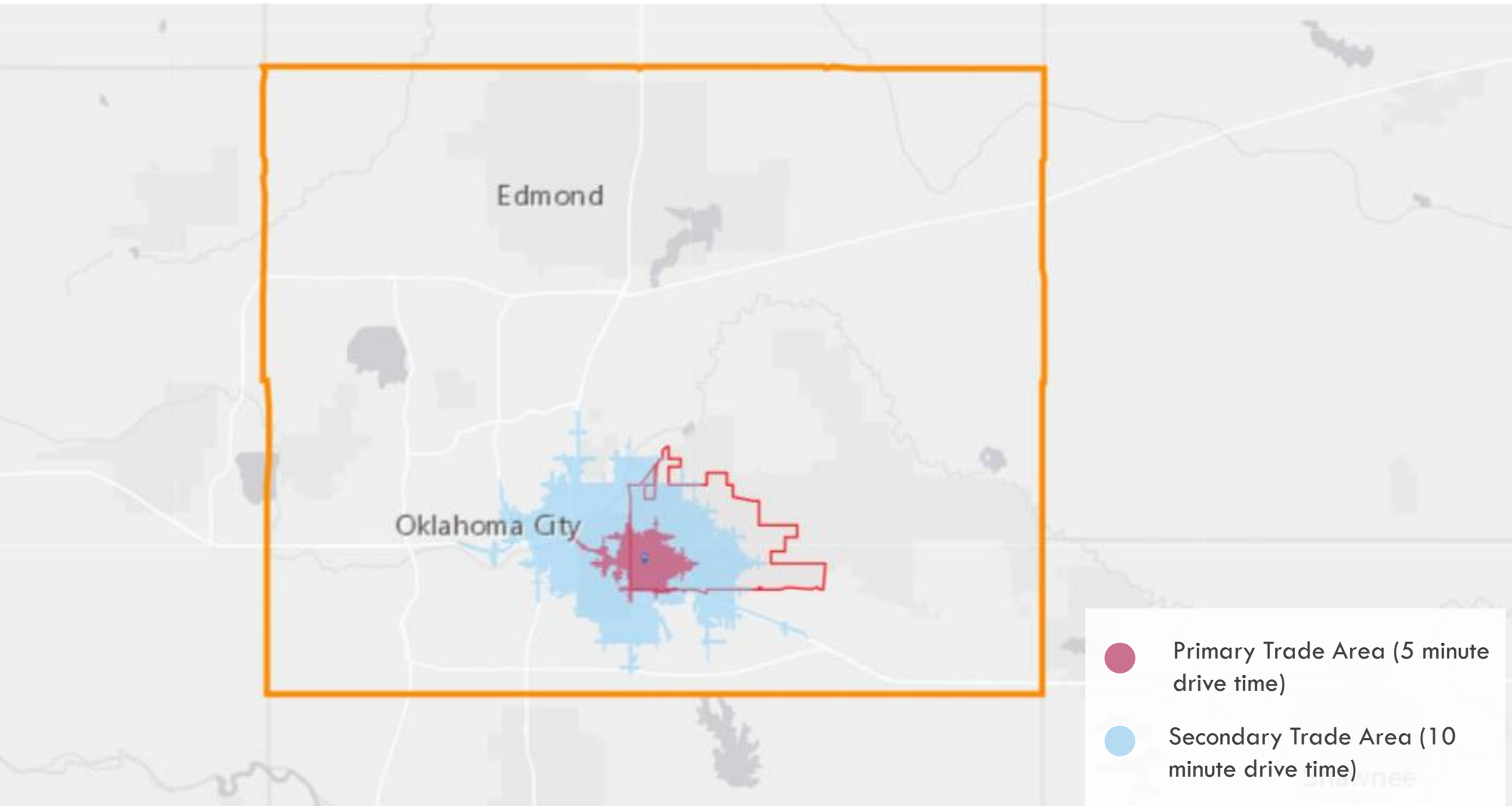
Market Scan: Retail

HR&A's retail analysis compares retail supply and performance in Midwest City with that of Oklahoma County.



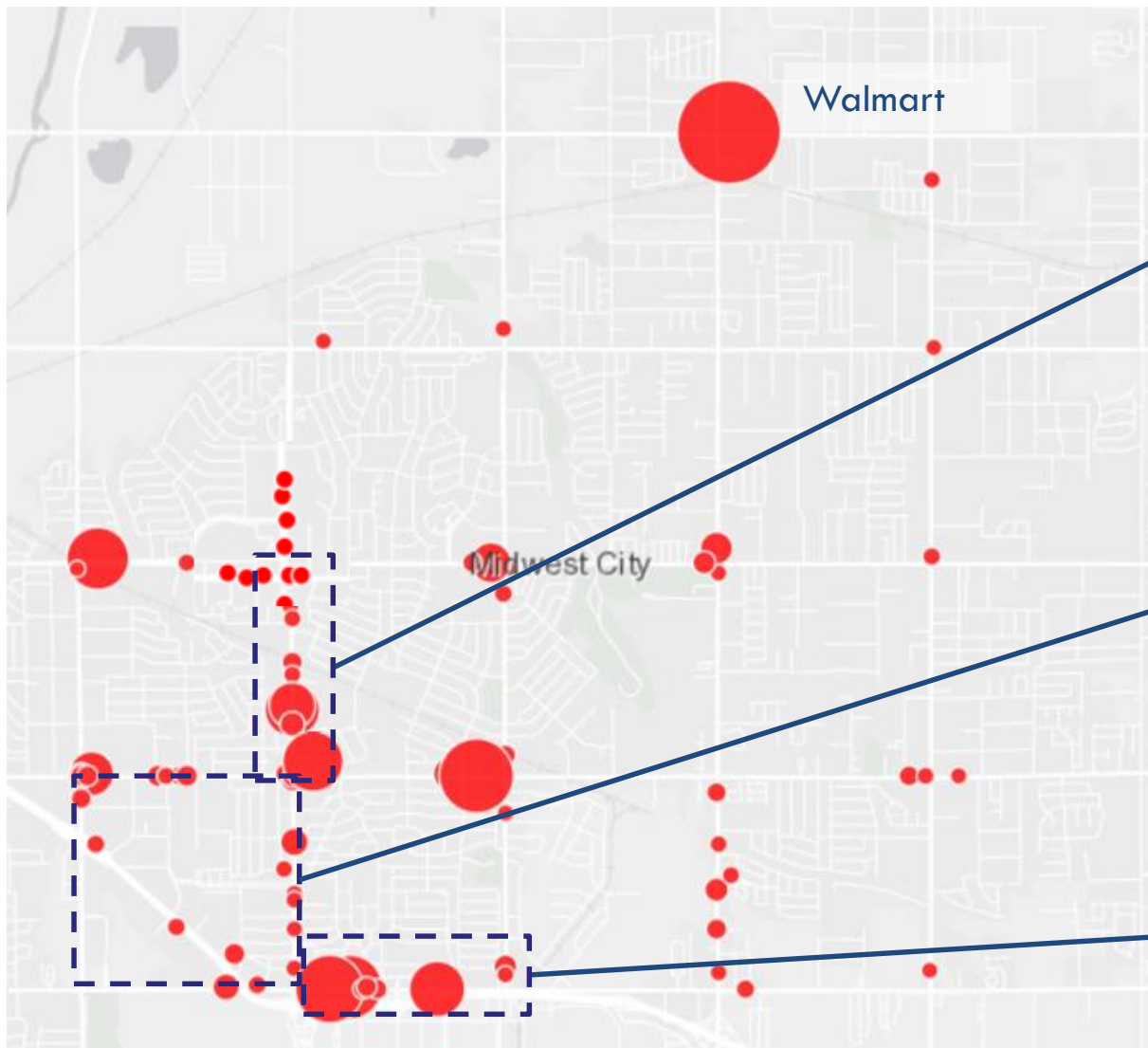
Source: EMSI

HR&A's analysis considers Trade Areas that reflect the behaviors of local retail and destination retail customers.



Source: EMSI

Within the Primary Study Area, Town Center Plaza is the strongest performing retail center commanding the highest rents with low vacancies.



S Air Depot Boulevard
594K SF | 4% Vacant | \$9 PSF



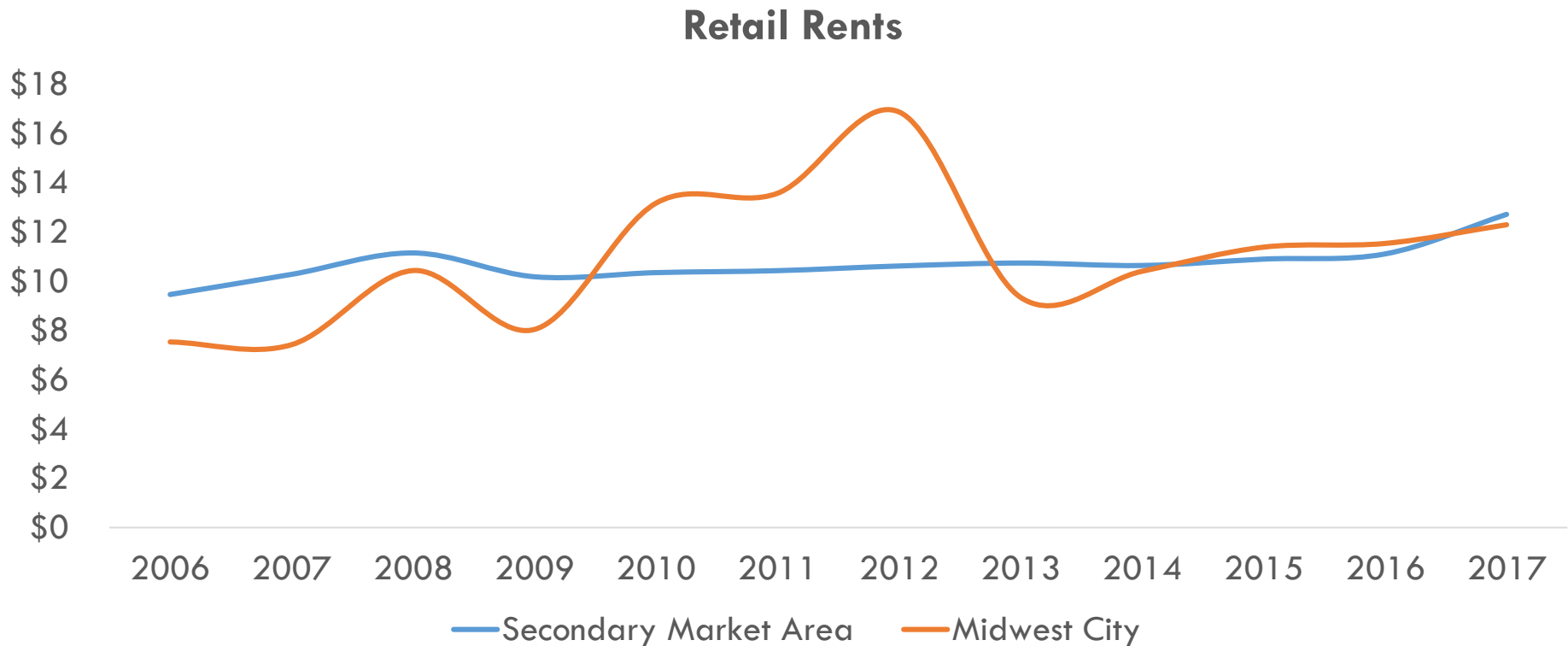
Innovation District
740K SF | 1.5% Vacant | \$12 PSF



Town Center Plaza
655K SF | 5% Vacant | \$22 PSF

Source: CoStar

Midwest City rents are competitive with the Secondary Market Area, averaging \$12 PSF, but vacancies are high at 17%.



**2016
Vacancy
Rates**

**Primary Study
Area
17%**

**Secondary Study
Area
12%**

Source: CoStar

Newer retail developments are performing better than the rest of the market. In Midwest City, public investment has supported these developments.



Town Center Plaza

- National chain retailers including Target, Lowes, and Marshalls
- Adjacent to proposed Innovation District
- 5% vacant, \$22 PSF
- \$7 million in tax increment financing



Sooner Rose Shopping Center Phase II

- Multiphase development with second phase anchored by entertainment-focused Warren Theatre
- Adjacent to proposed Innovation District
- \$16 million in tax increment financing

As brick and mortar retail struggles nationally, Downtown Oklahoma City retailers have found success with unique retailers and restaurants.



Automobile Alley

- Distinctive dining and diverse food options offer a variety of retail options and support evening activity
- At \$17 PSF, rents are some of the highest in the region
- Retail vacancy is below 15%, down from a high of 25% five years ago



Bricktown

- A distinctive, walkable neighborhood with a variety of dining and entertainment options draw visitors from across the region
- National retailers have been followed recently by local tenants and developers
- \$18 PSF rent rates are high, but the area is still absorbing space, with 14% vacancy

Source: CoStar, The Oklahoman Archives

HR&A's retail analysis considers the opportunity to introduce new retail options that include both local serving and destination retail.

Convenience Retail	 Convenience Goods	<ul style="list-style-type: none">• Health and Personal Care Stores• Florists• Office Supplies
	 Grocery	<ul style="list-style-type: none">• Grocery Stores
Comparison Retail	 Comparison Goods	<ul style="list-style-type: none">• Furniture• Electronics and Appliance• Clothing• Sporting and Hobby Goods• General Merchandise
	 food and beverage	<ul style="list-style-type: none">• Drinking Places• Restaurants

Demand for new retail will be driven by the Trade Areas' residents and the workers in the immediate vicinity of the proposed Innovation District.



Existing residents living within the **Secondary Trade Area**.

89,500 residents



Area employees within the Primary Trade Area dining or shopping during lunch hours or before/after work.

11,200 workers



Students at Rose State College dining or shopping while in class or studying on campus.

9,600 students

Source: ESRI, LEHD, Rose State College

As a local retail destination, retail spending is spread throughout both the Primary and Secondary Trade Area.

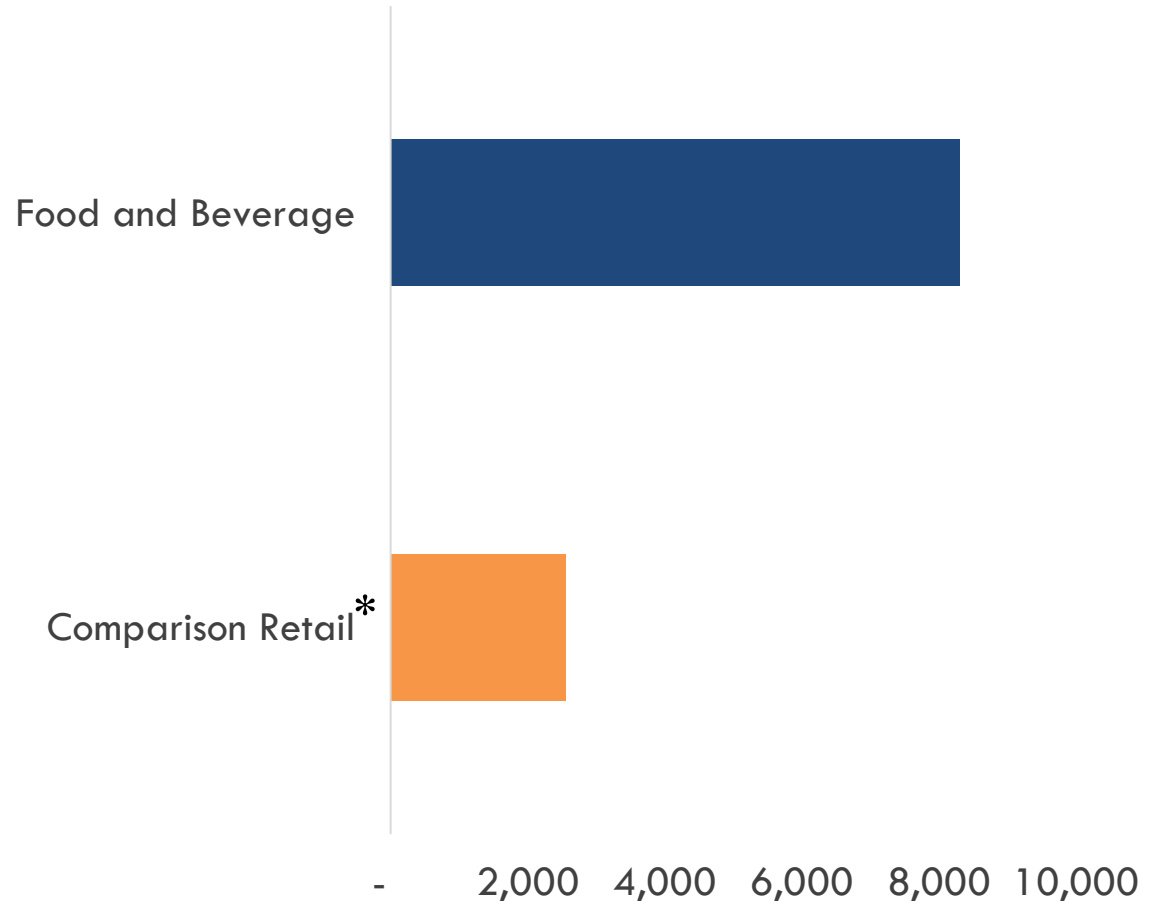
2016 Spending	Primary Trade Area	Secondary Trade Area
Total Retail	\$356,800,000	\$375,000,000
Convenience Goods	\$48,200,000	N/A
Comparison Retail	\$183,300,000	\$250,900,000
Grocery	\$64,500,00	N/A
Food & Beverage	\$60,500,000	\$124,100,000

Source: ESRI, CAMPO

Using retail industry spending standards, there is a gap of approximately 8,300 SF of food and beverage retail in the Primary Trade Area.

Primary Trade Area Capturable Retail SF

- Demand from the Primary Trade Area generated a **gap in food and beverage**
- Without a critical mass of Comparison Retail, **food and beverage is the only viable retail product** at this site



*Comparison retail requires critical mass to succeed.

Source: ESRI

Retail Findings

The Midwest City retail market is in a transition period after a period of large mall closures.



Large shopping centers are not likely to be viable given the current and pipeline supply in the Innovation District area.

Experiential retail is drawing shoppers, residents, and visitors to Downtown Oklahoma City.



Any retail at the Innovation District should be carefully curated to be distinguished from nearby retailers.

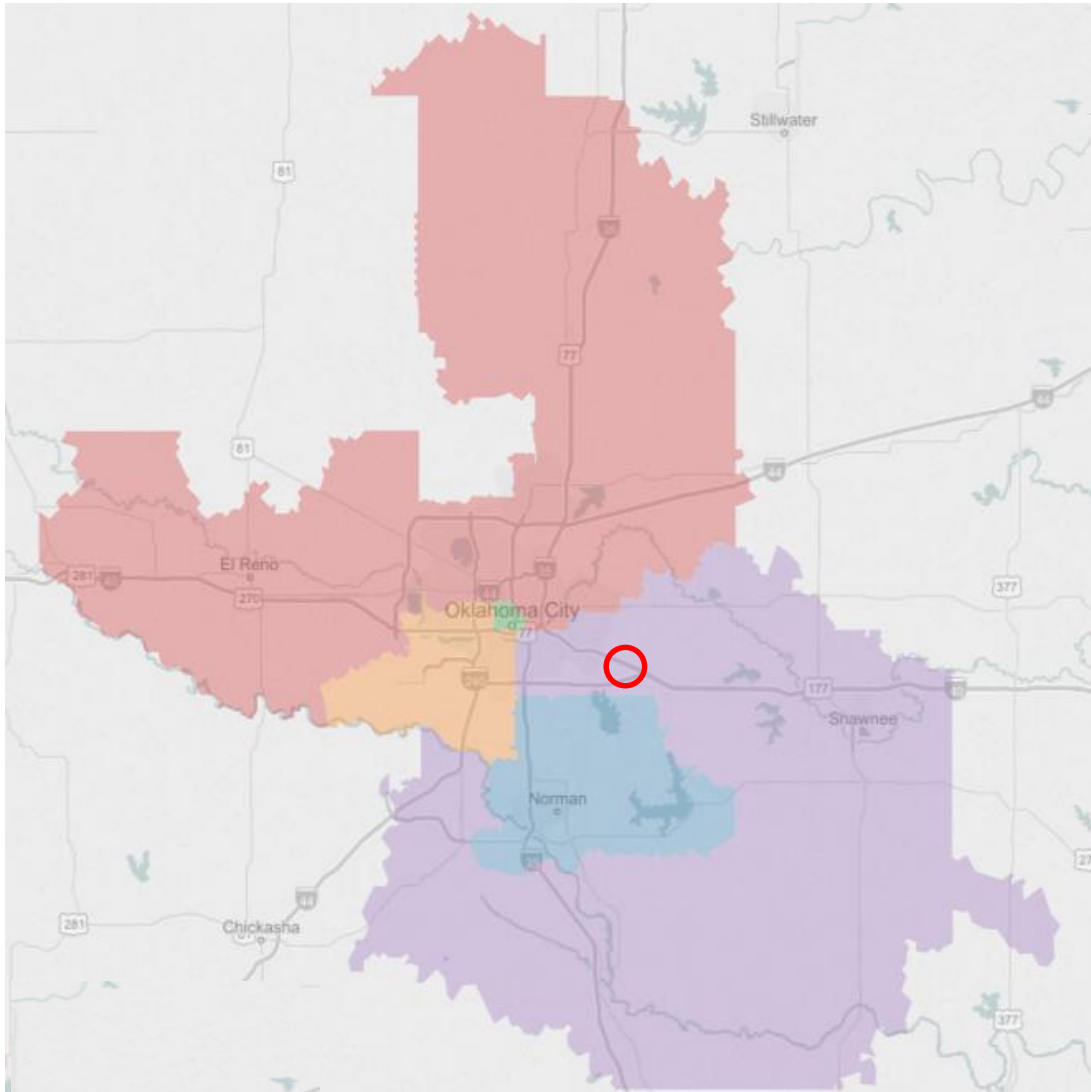
With large retailers performing well at newer local shopping centers, there is no gap in most retail goods.



The 8,300 SF food and beverage retail gap could be leveraged within the District would enhance retail and entertainment options.

Market Scan: Hotel

Using industry-defined hotel submarkets, HR&A analyzed the Southeast Oklahoma City submarket's midscale hotel landscape.*

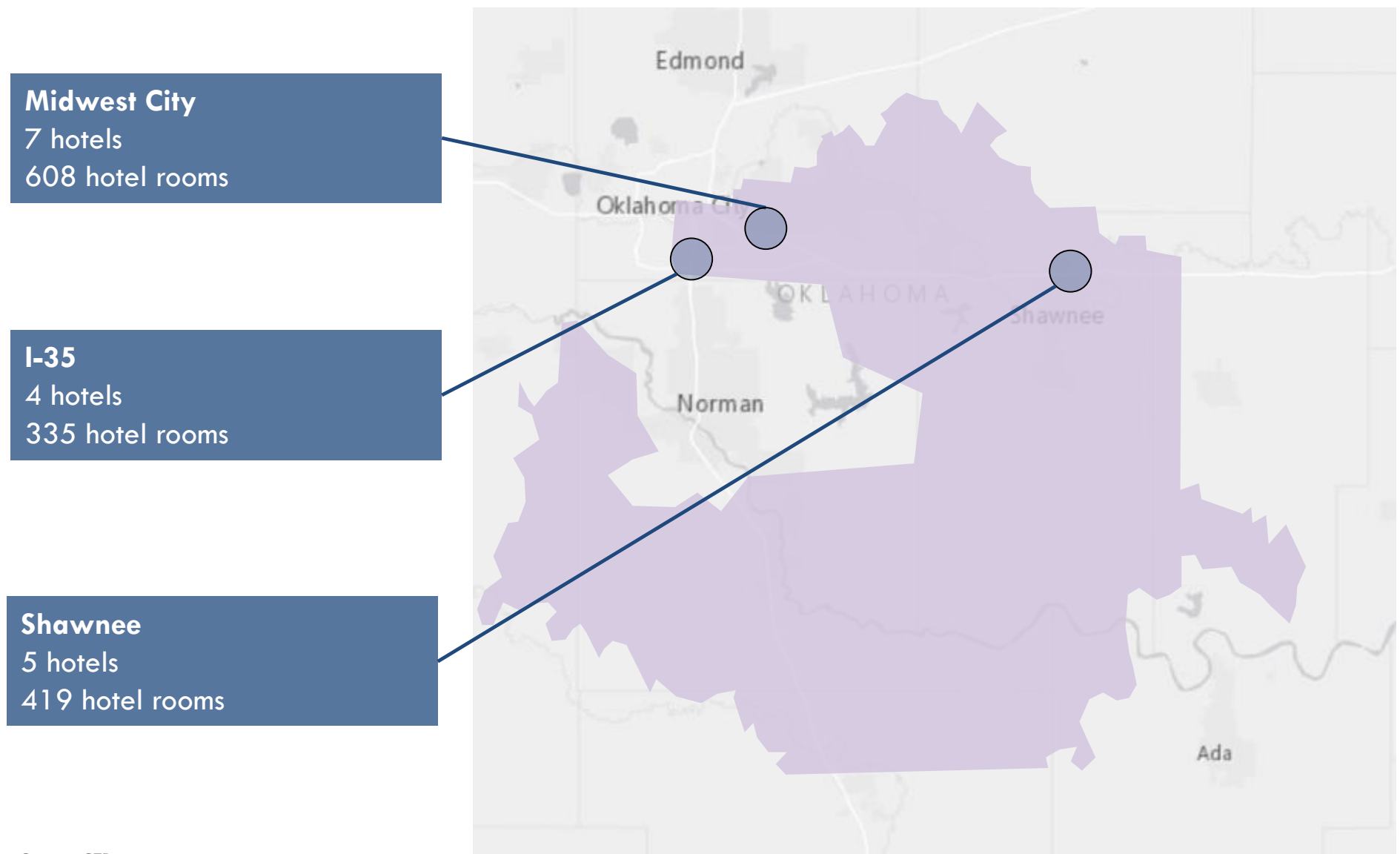


- Southeast Submarket
- North/West Submarket
- Airport Submarket
- Moore Submarket
- Downtown Submarket

*This analysis did not include economy hotels, such as motels. In addition, there are no upscale hotels in the submarket. Hotel submarkets are defined by leading global hotel industry group, STR.

Source: STR

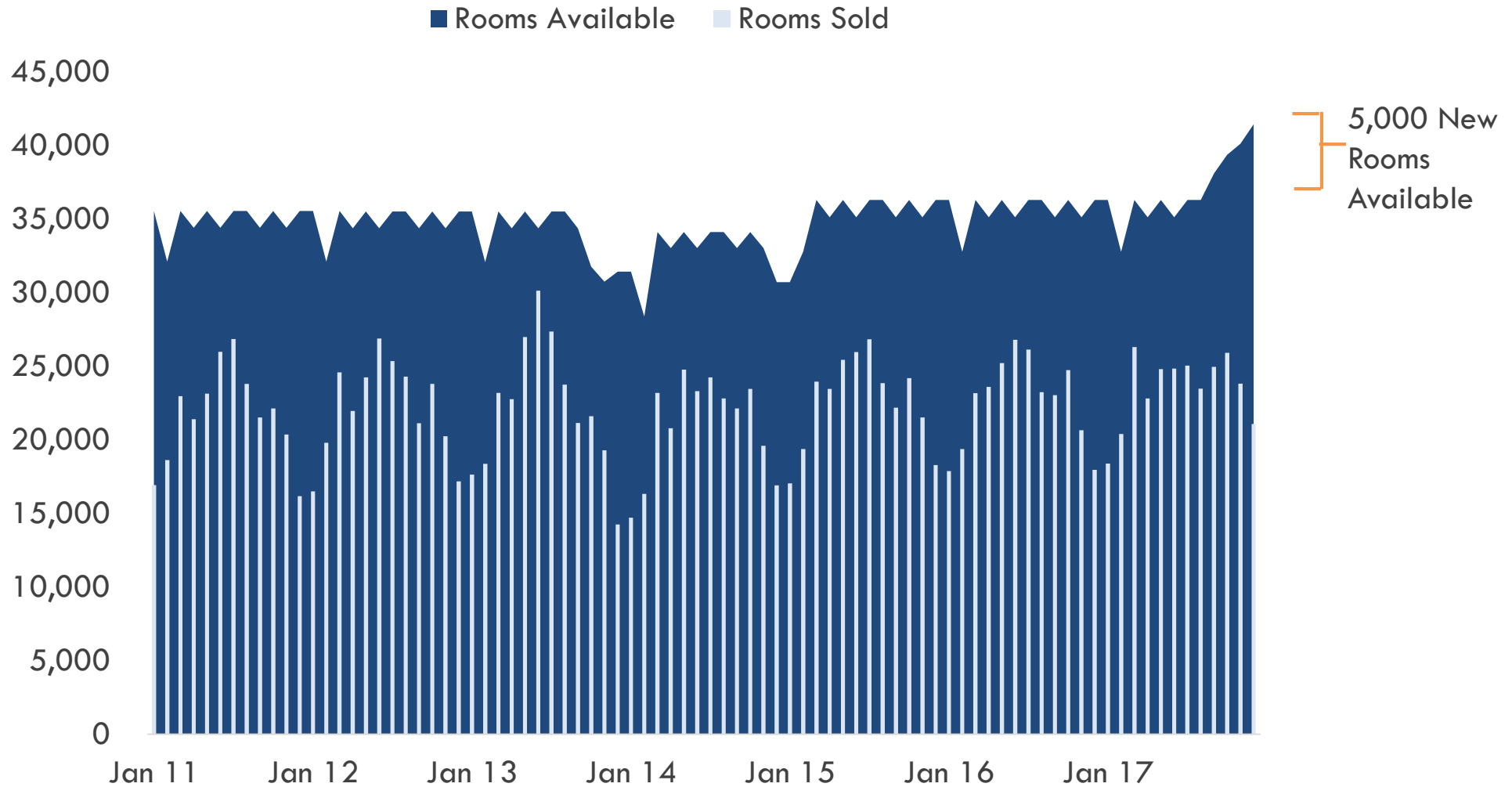
Midwest City's hotel district is the largest node of the submarket's midscale hotel product.



Source: STR

Hotel supply had historically kept pace with demand, but recent expansions in 2017 have created the largest increase in supply since 2011.

Hotel Supply & Demand, SE Oklahoma Submarket



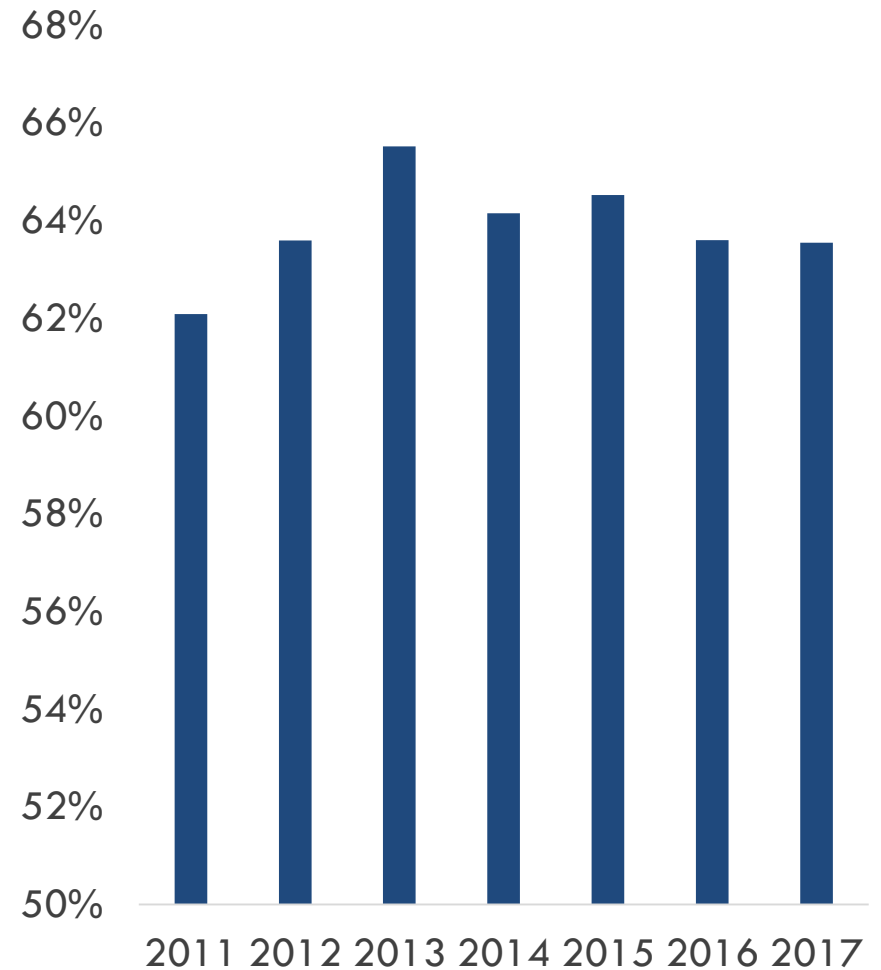
Source: STR

Average daily rates* and occupancy have both been falling in recent years, and there are signs that the market is still absorbing new product.

Average Daily Rate



Average Annual Occupancy



Source: STR

*Average rental income per paid occupied room

Midscale hotels have expanded regionally and upper scale hotels are locating to amenitized neighborhoods attractive to visitors.

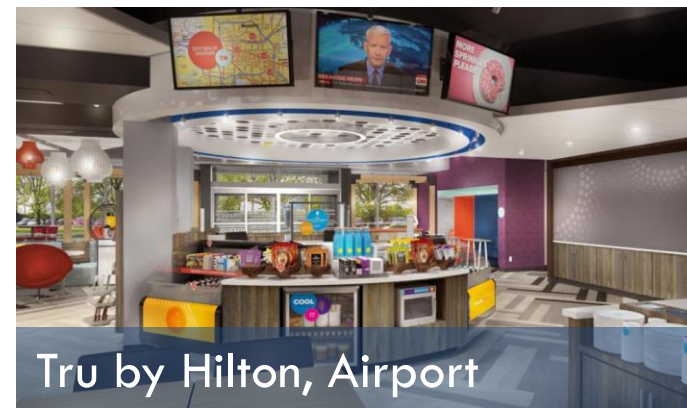
Downtown Oklahoma City

- Locations near vibrant urban districts like Bricktown, Automobile Alley, and Film Row supplement in-house amenities
- As a result, new boutique hotels such as the AC hotel and 21C have gravitated toward these areas surrounding Downtown



Airport

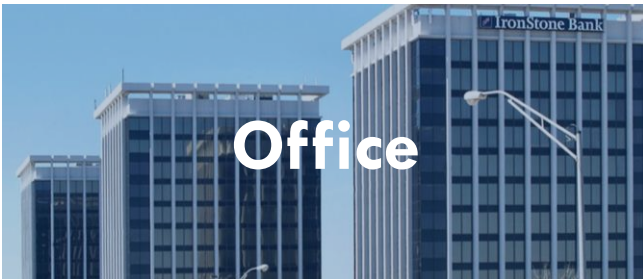
- Newer midscale hotels, including Tru, a new product by Hilton, are locating near the airport
- Large amounts of available land around the airport continue to make the area an attractive location for new hotels



Key Initial Findings



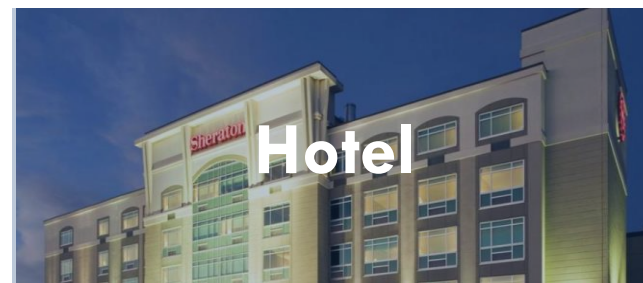
- New multi-family product in the region has been successful, but rental growth has slowed or fallen.
- Few quality multifamily developments in and around Midwest City may show a market gap for this product.



- There is very limited potential for speculative office.
- New office space will require significant pre-leasing commitments and partnerships or flexible, affordable office space.



- The Midwest City retail market is in a transition period after a period of large mall closures.
- The only retail gap is in food and beverage retail that could fill needed destinations at the Innovation District.



- Supply has recently grown with new hotel product in the market while there has been an expansion of hotel options in other submarkets.
- There is no clear demand for additional hotels in Midwest City.

Industry Cluster Analysis

HR&A's cluster analysis begins by identifying existing regional strengths.

Specialization

Objective

Identify existing industries in the local and regional market that **attract outside investment**.

Process – Location Quotient Analysis

1. Calculates the **percent of total regional employment** represented by each industry
2. Divides this percentage by the comparable percent of industrial employment of a **larger reference region**, like the State of Oklahoma or the U.S.
3. Resulting **Location Quotients (LQ)** above 1.25 indicates specialization relative to the reference region

Example

- $1,000 \text{ information employees out of } 10,000 \text{ employees regionally} = 1,000/10,000 = 0.1$
- $20,000 \text{ information employees out of } 500,000 \text{ employees in the State} = 20,000/500,000 = 0.04$
- $0.1/0.04 = 2.5$ indicates specialization in information relative to the State

Next, HR&A explored how the region's areas of economic competitiveness could leverage new complimentary markets in Midwest City.

Competitiveness

Objective

Identify how **local conditions in the Oklahoma City Market** are impacting industries over time

Process – Shift Share Analysis

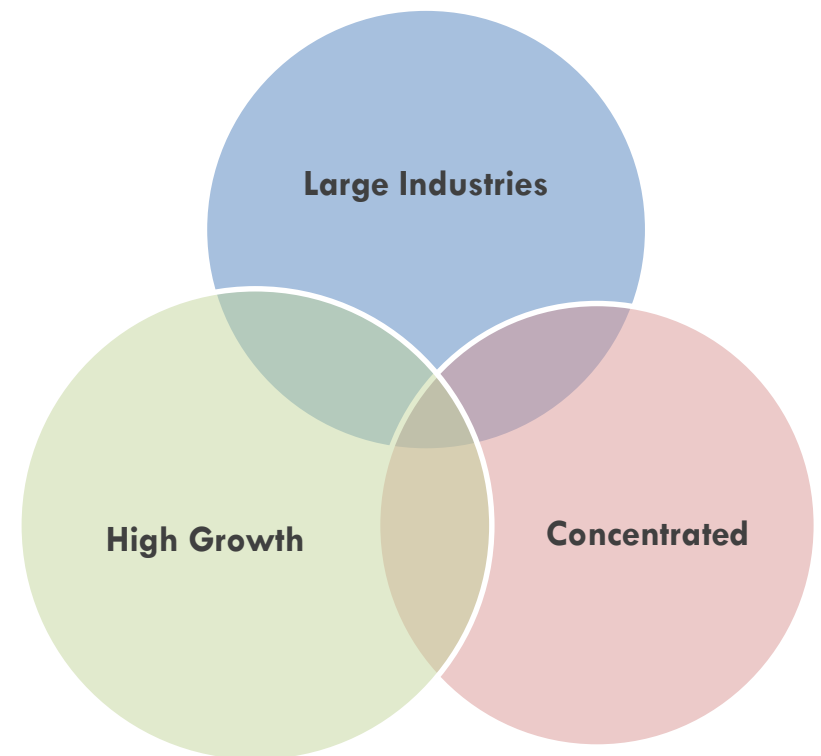
1. Assumes industry growth is the **cumulative sum of:**
 1. Total national growth rate
 2. Industry-specific growth rates at a national level
 3. Local factors collectively known as the **local competitive component**
2. Solves for local competitive component by subtracting expected employment change from national growth and industry-specific growth

Example

- A local logging industry gained 100 jobs from 2006-2016
- Over the same time period, overall national growth is expected to contribute 20 logging jobs locally
- The logging industry nationally has contracted, its impact locally is expected to be a loss of 150 jobs
- Local competitive component = $100 - 20 + 150 = 230$ 'jobs'

HR&A evaluated priority sectors for future growth opportunities within the proposed Innovation District using three criteria.

- 1. Large Industries:** Robust employment in industries employing 1,000 or more indicates **potential for greater growth** since there is already existing investment in the market.
- 2. Concentrated:** A location quotient greater than 1.25 indicates a **regional concentration in an industry**, with the region's employment concentration greater than the national average.
- 3. High Growth:** A competitive component above zero indicates the **number of jobs gained that can be attributed to regional specific factors**, indicating the region's specific competitiveness in that industry.



HR&A evaluated industry opportunities for the Innovation District based on current opportunities in Midwest City and their catalytic innovation potential.

Regional Growth

*What industries are growing regionally?
What hubs or regional assets have attracted industry investment?*

Current Conditions

*How has Midwest City captured existing industry growth?
What existing assets are attractive to that industry?*

Innovation District Catalytic Potential

*What can an Innovation District do to accelerate industry growth locally?
How do the industry's talent and capital needs fit the Innovation District vision?*

Low Opportunity

Limited near term opportunities likely to occur

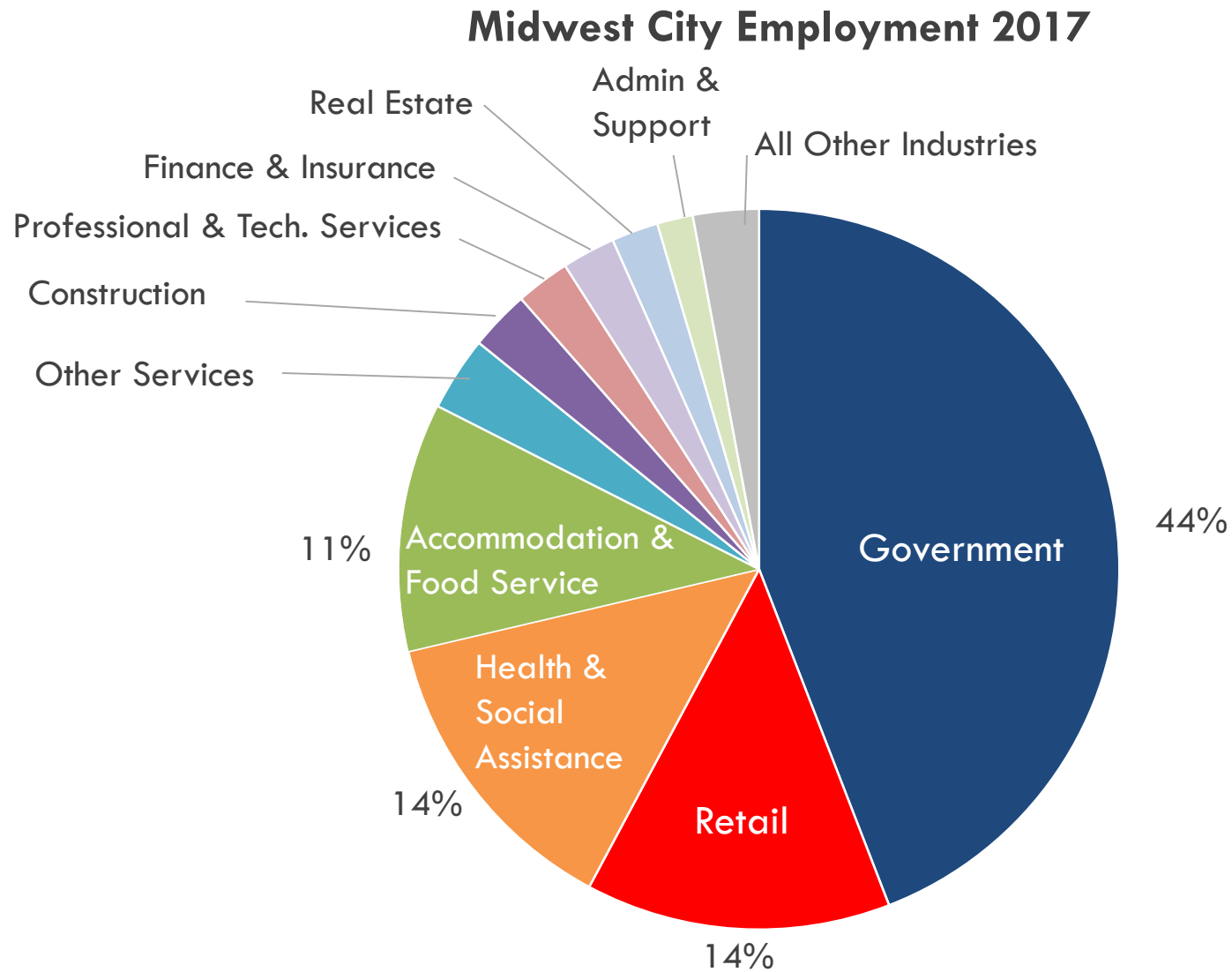
Medium Opportunity

Potential for accelerated local growth through Innovation District development and activities

High Opportunity

Strong sector that requires minimal support for further growth

Government and retail employment make up more half of all jobs in Midwest City.



Source: EMSI

Tinker Air Force base is one of Midwest City's most important employers and a key anchor for the proposed Innovation District.

- Home to the Air Force's largest depot repair complexes
- Employs **26,000+ military personnel and civilians**
 - 9,400 military and civilian employees dedicated to aircraft repair and readiness
 - 72nd Air Base Wing employs 1,600 personnel and 1,300 civilian contractors
- Tinker has **created 33,000 secondary jobs** within the Oklahoma City region.



Source: Tinker Air Force Base – U.S. Air Force

In the last 10 years, Midwest City has seen stagnant job growth with only modest increases in lower-paying jobs like food service.

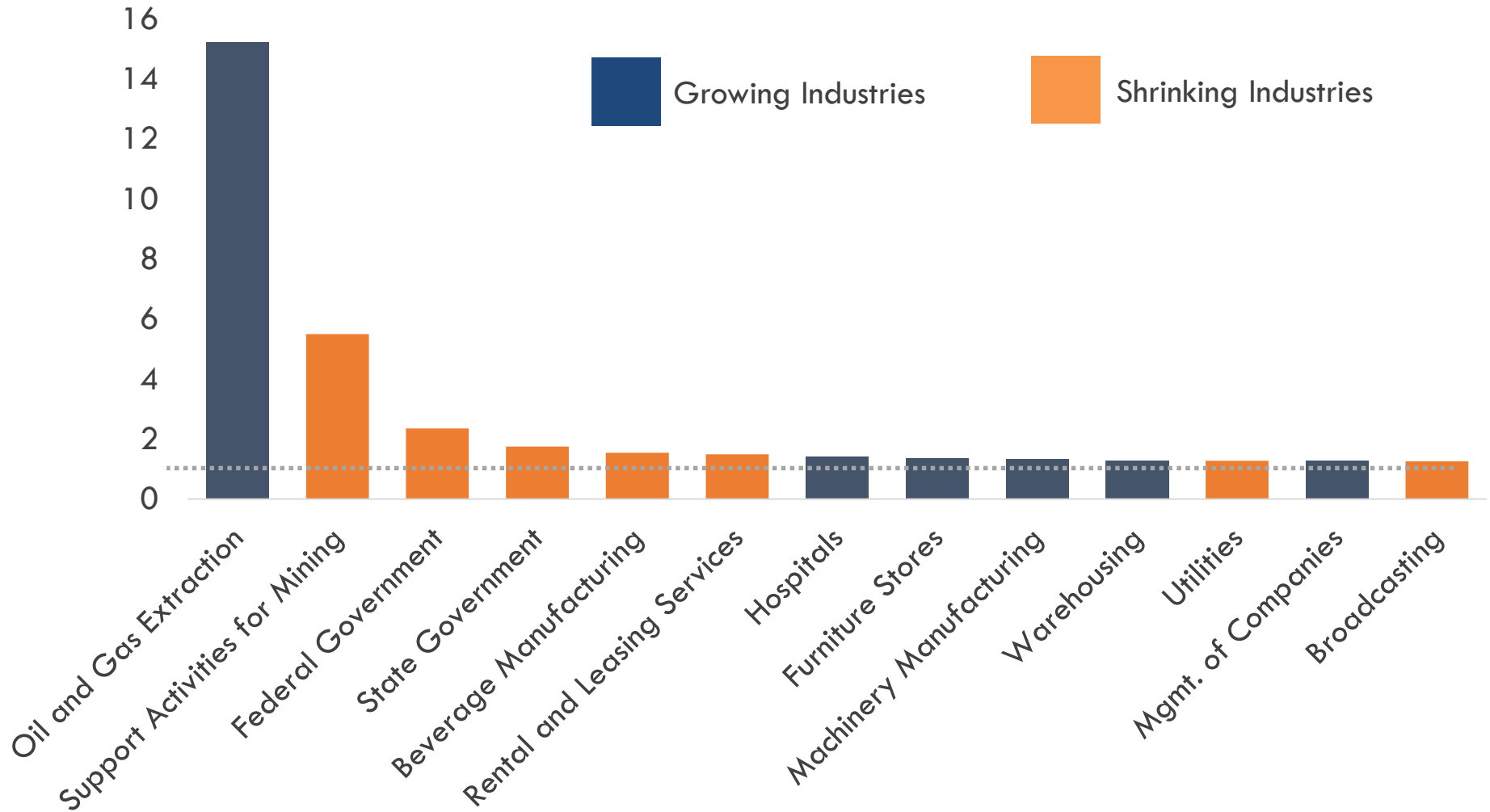
Description	2007 Jobs	2017 Jobs	CAGR*
Federal Government	5,136	5,191	0.11%
Local Government	2,926	3,133	0.69%
State Government	2,820	2,797	-0.08%
Food Service	2,134	2,558	1.83%
Ambulatory Health Care Services	1,032	1,204	1.55%
Hospitals	910	1,048	1.42%
General Merchandise Stores	927	761	-1.95%
Motor Vehicle and Parts Dealers	640	704	0.95%
Professional, Scientific, and Technical Services	501	608	1.96%
Nursing and Residential Care Facilities	554	591	0.65%
Social Assistance	500	563	1.18%
Specialty Trade Contractors	562	538	-0.44%
Administrative and Support Services	289	393	3.10%
Real Estate	402	383	-0.49%
Building Material and Supplies Dealers	353	380	0.73%
Total	19,686	20,582	1%

Source: EMSI

* Compound Annual Growth Rate

The oil and gas industry still dominates the region, but this sector alone has limited potential to grow the innovation economy in Midwest City.

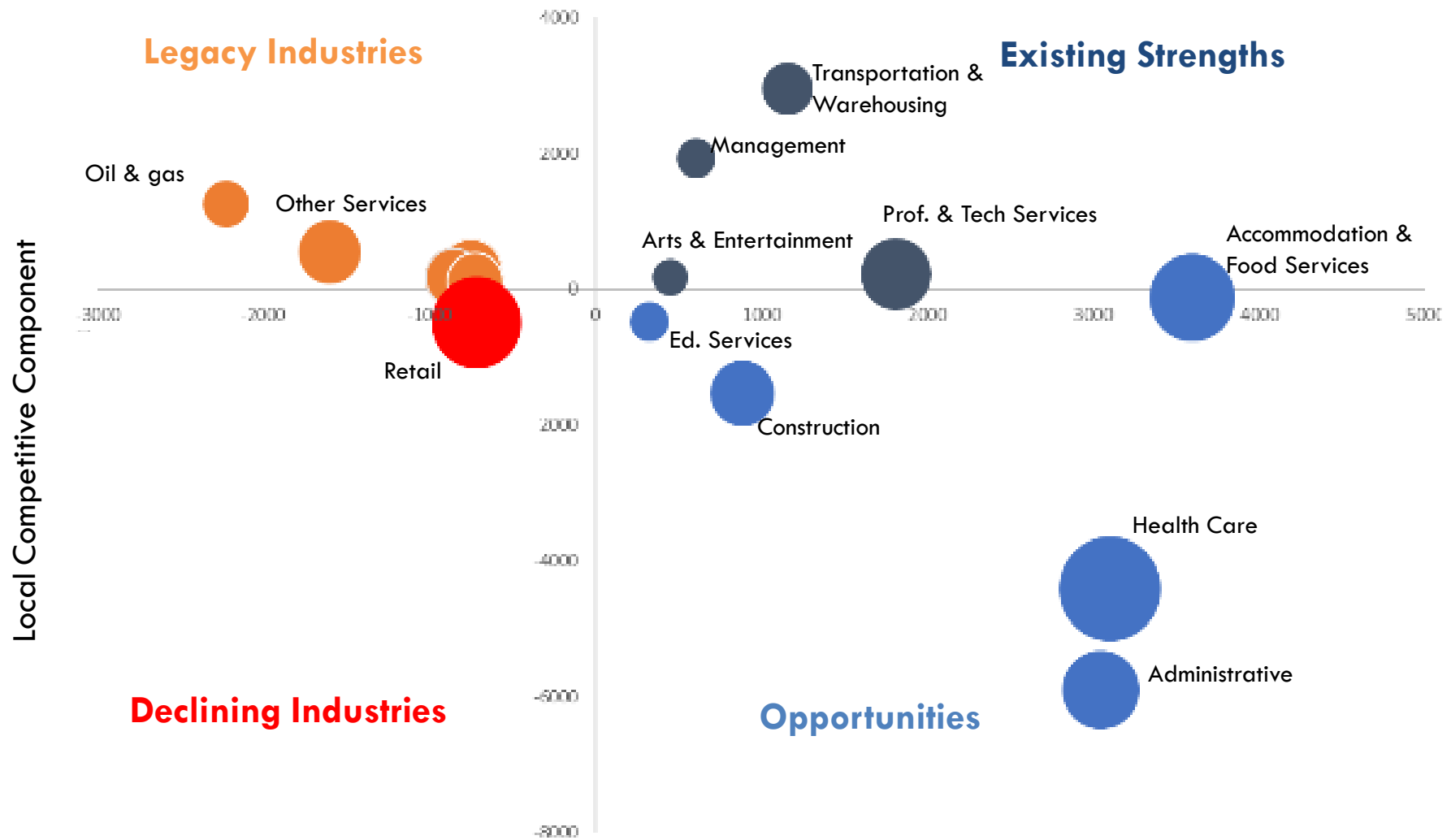
Oklahoma County Location Quotients, 2017



Source: EMSI

Note: Location Quotients above 1.25 indicates regional specialty.

Midwest City can harness existing regional strengths, or pursue opportunities from national growth not yet reflected regionally.



- Jobs Expected from Industry-wide Growth

Source: EMSI

Industrial partnership efforts may center around several areas that leverage existing activities and initiatives in *Midwest City*, as well as regional growth.



Capitalize on nearby industries including Tinker Air Force Base and Boeing.



The cyber security program at Rose State has expanded by 13% in recent years. A recently received NSF scholarship grant could be the basis for continued Federal investment.



An \$8M research grant was awarded University of Dayton Research Institute in 2016 to lead a national program that will use additive manufacturing to help the Air Force more efficiently and affordably sustain aging aircraft.

The aerospace industry is growing in the region, but is concentrated in a few firms and regional competition to attract these companies is high.



290% growth since 2010



Most growth is **concentrated in only a few firms**

Industry	2017 Jobs	2010-2017 % Change	Avg. Earning Per Job	2017 LQ	2017 Competitive Component
Aerospace Product and Parts Manufacturing	2,413	290%	\$133,700	1.60	1,781

Note: Location Quotients above 1.25 indicates regional speciality.

Source: EMSI

Boeing and Northrup Grumman have driven the growth in the aerospace industry, but this expansion is dependent on Dept. of Defense contracts.



Innovation District Opportunity: Medium/Low

- **Types of Spaces Sought:** Research, modeling labs, design labs, machine shops.
- **Pro:** High growth in the industry signals potential for expanding aerospace firms to collocate with existing companies.
- **Pro:** Nearby investments and institutions such as Tinker Air Force Base and Boeing are critical anchors.
- **Con:** Reliance of aerospace industry on government contracts exposes the industry to single source of funding.
- **Con:** Concentration of aerospace companies located around the Will Rogers Airport and Monroney Aeronautical Center is a primary competitor in the region.
- **Con:** Industry's high capital costs may limit the opportunities for small and medium business to locate in Midwest City.

Cyber security is a multi-disciplinary field that is growing nationally and expanding rapidly, bringing new knowledge-based jobs to the area.



High growth in specialized scientific and technical services



High concentration in security system services paired with national industry growth

Description	2017 Jobs	2010 - 2017 % Change	Avg. Earnings Per Job	2017 Location Quotient	Job Change Due to Competitive Component
Computer Systems Design Services	1,067	23%	\$79,200	0.34	-153
Other Scientific and Technical Consulting Services	1,050	465%	\$66,500	1.41	829
Security Systems Services (except Locksmiths)	648	13%	\$58,400	1.61	-62
Total, all Cyber Security sectors	2,765	500%	\$68,000		615

Source: EMSI

The Innovation District can build on existing academic programs to support new jobs focused on cyber security.



Innovation District Opportunity: **Medium/Low**

- **Types of Spaces Sought:** Office, lab, high performance computing systems, secure facilities.
- **Pro:** High growth in the cyber security program at Rose State could drive continued Federal investment.
- **Pro:** The defense industry is increasing concerned with cyber attacks and the security of their digital assets. Nearby industries like Boeing and Northrop Grumman could be key partners in growing a local cyber security industry.
- **Con:** Cyber security is a small industry, employing fewer than 3,000 workers in Oklahoma County in private firms.
- **Con:** Information technology as a whole has been shrinking in Oklahoma County, which could mean that success in cyber security may have to be found independent of traditional technology clusters.

The region lacks established manufacturing sectors in many of the key additive manufacturing industries.

- The additive manufacturing industry, which includes **the research, design, and use of 3D printed technology, including both metals and plastics**, is still in its infancy; thus, it is difficult to accurately measure industry activity.
- Many industries are **very small or shrinking regionally**.

Description	2017 Jobs	2010 - 2017 % Change	Avg. Earnings Per Job	2017 Location Quotient	Job Change Due to Competitive Effect
Spring and Wire Product Manufacturing	66	94%	\$36,610	0.50	32
Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	451	4%	\$64,196	0.41	-33
Other Fabricated Metal Product Manufacturing	1,569	-5%	\$57,283	1.87	-233
Engine, Turbine, and Power Transmission Equipment Manufacturing	31	29%	\$57,973	0.10	5
Medical Equipment and Supplies Manufacturing	506	-21%	\$74,341	0.52	-139
Total, all Additive Manufacturing Sectors	2,623	103%	\$58,000		-268

Source: EMSI

Supporting growth in additive manufacturing is a natural fit for the Innovation District, and builds on existing strengths.



Innovation District Opportunity: **Medium**

- **Type of Spaces Sought:** Research, office, labs with 3-D printing machines, clean rooms, fabrication space.
- **Pro:** High growth industry nationally with applications across related industries that are only starting to be explored.
- **Pro:** There is interest from the Air Force in additive manufacturing, reflected in the recent \$8M research grant.
- **Con:** High initial equipment costs and high likelihood of obsolescence of equipment present challenges.
- **Con:** The additive manufacturing industry is highly competitive. Other research and educational institutions have already invested heavily in technology, programs and partnerships, including research done by Oklahoma State and University of Oklahoma.

Readiness and resilience are recurring themes in Midwest City's history and current workforce that could be concentrated in new industries.

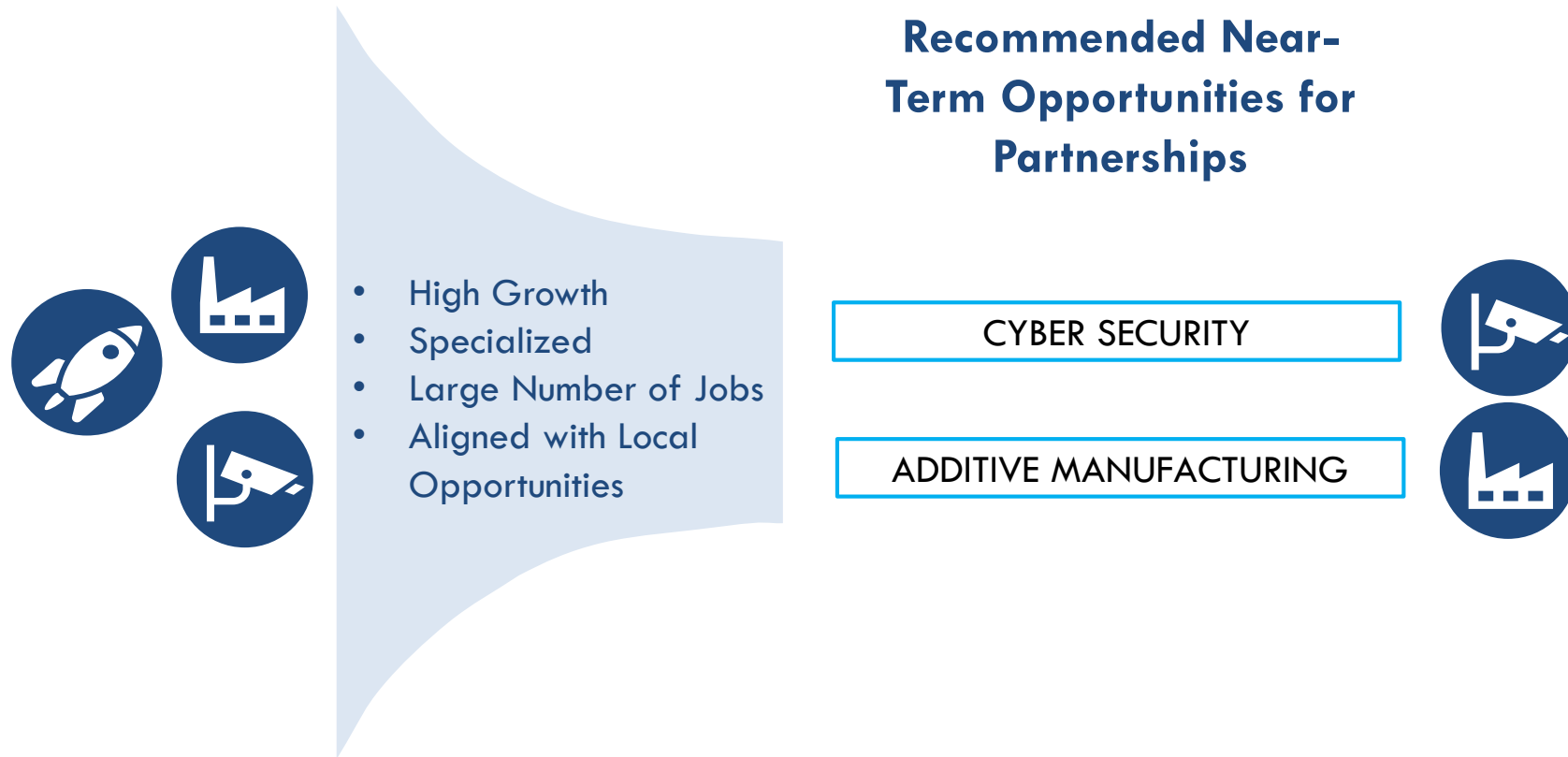
Midwest City's commitment to reinvesting and revitalizing the Original Mile neighborhood. This **history could provide a living laboratory** for Innovation District ideas and products.



Tinker Air Force Base's Air Logistics Complex performs maintenance and repair to ensure mission-readiness. **Skill and knowledge transfer in 3D printing** around these objectives could be an programmatic anchor of the Innovation District.

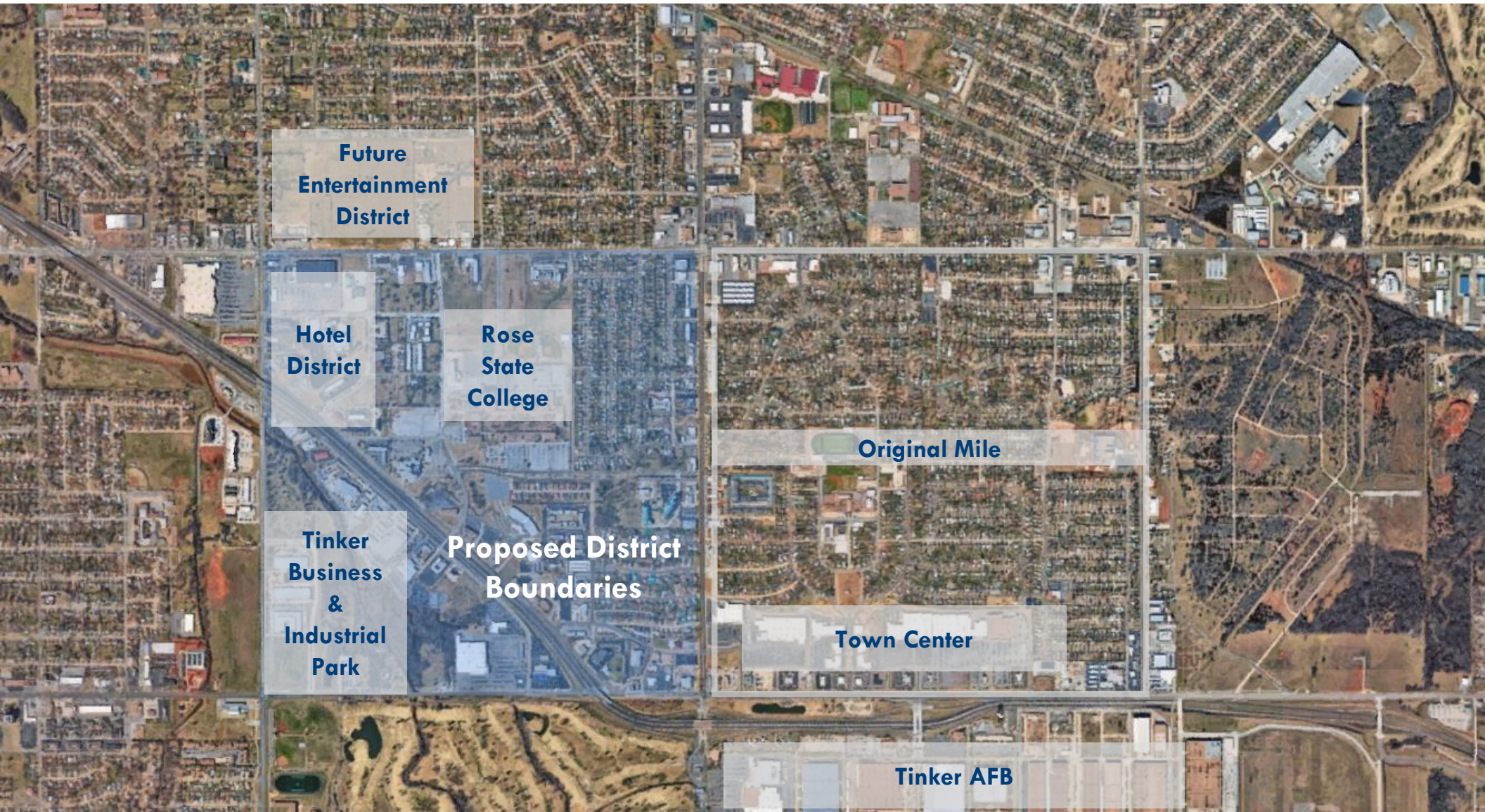


HR&A's initial analysis suggests positioning the Innovation District around readiness and resilience spaces of the cyber security and additive manufacturing fields.

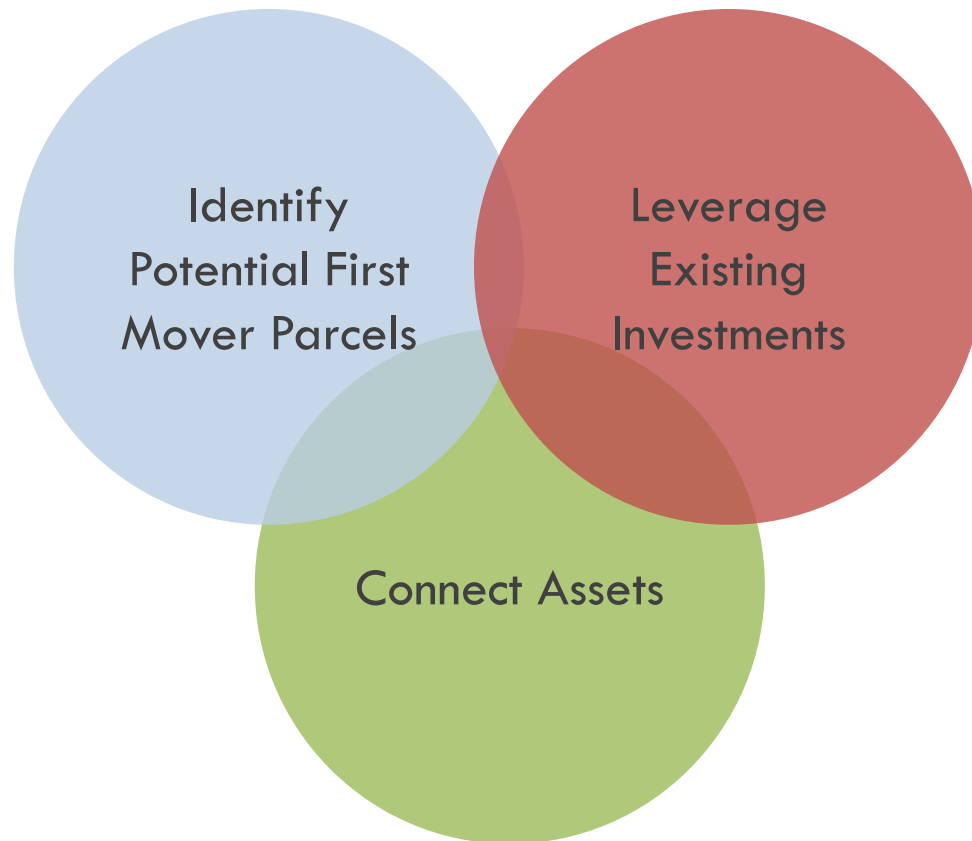


Physical Conditions Assessment

The proposed Innovation District site is well-positioned to take advantage of Midwest City's existing assets.



Through the Physical Conditions Assessment, HR&A will identify key sites and opportunities within the Innovation District boundaries for initial investment.



A priority focus area will need to respond to the vision for the future Innovation District, respond to market opportunities, and address site constraints.

Vision

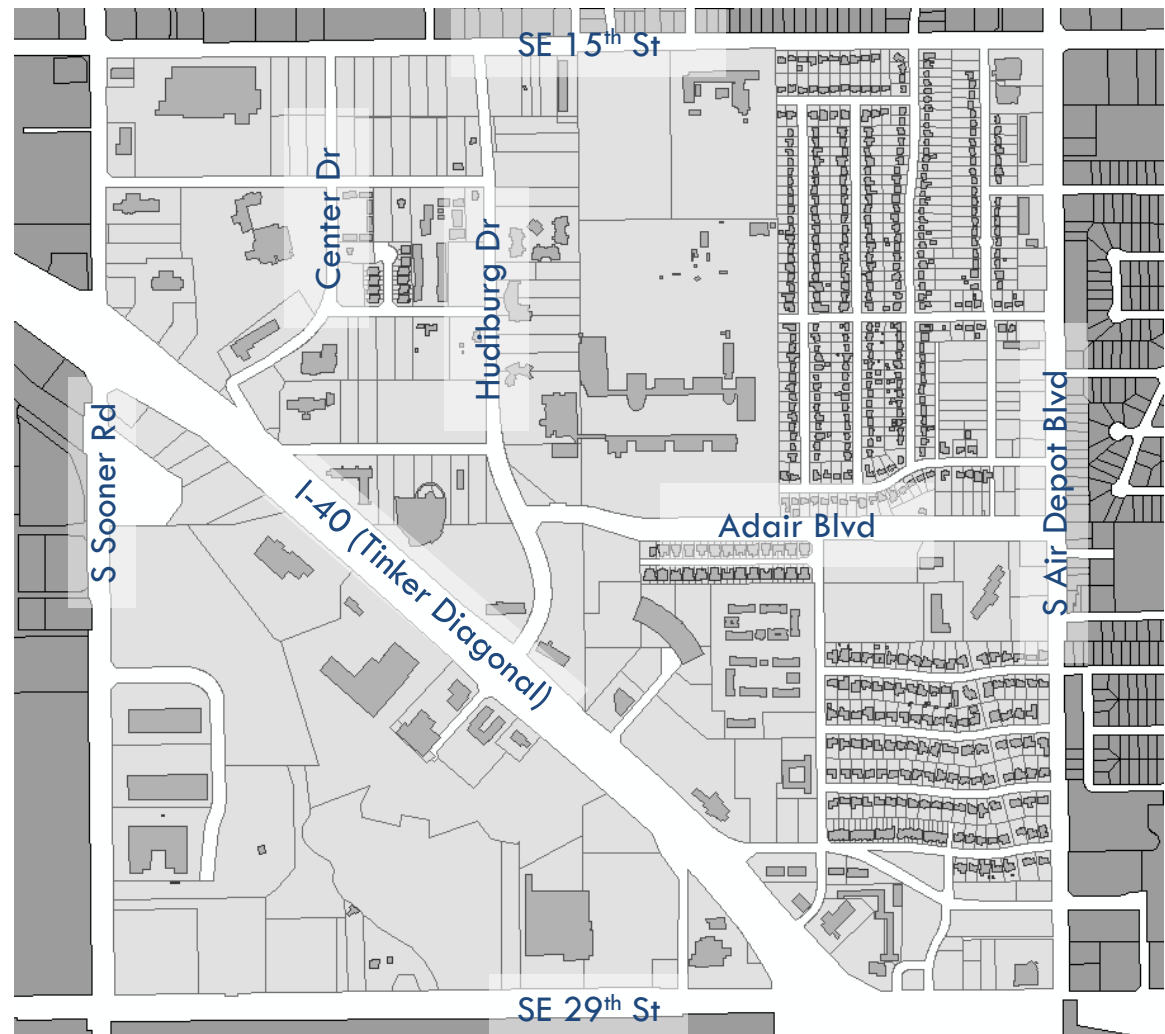
- What does the Innovation District look and feel like?

Market Opportunities

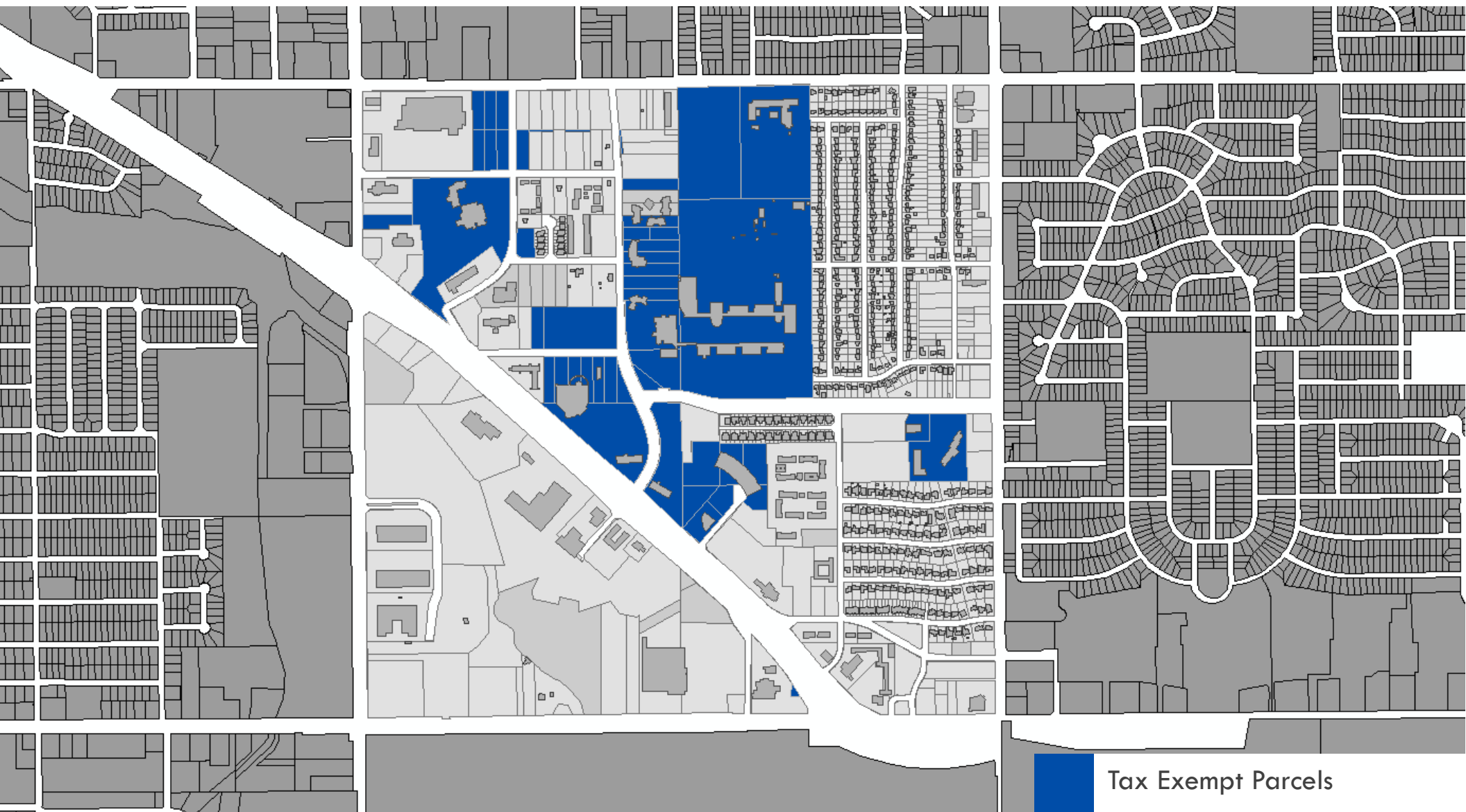
- How does the District attract and retain existing or future workers, residents, and visitors?

Site Constraints

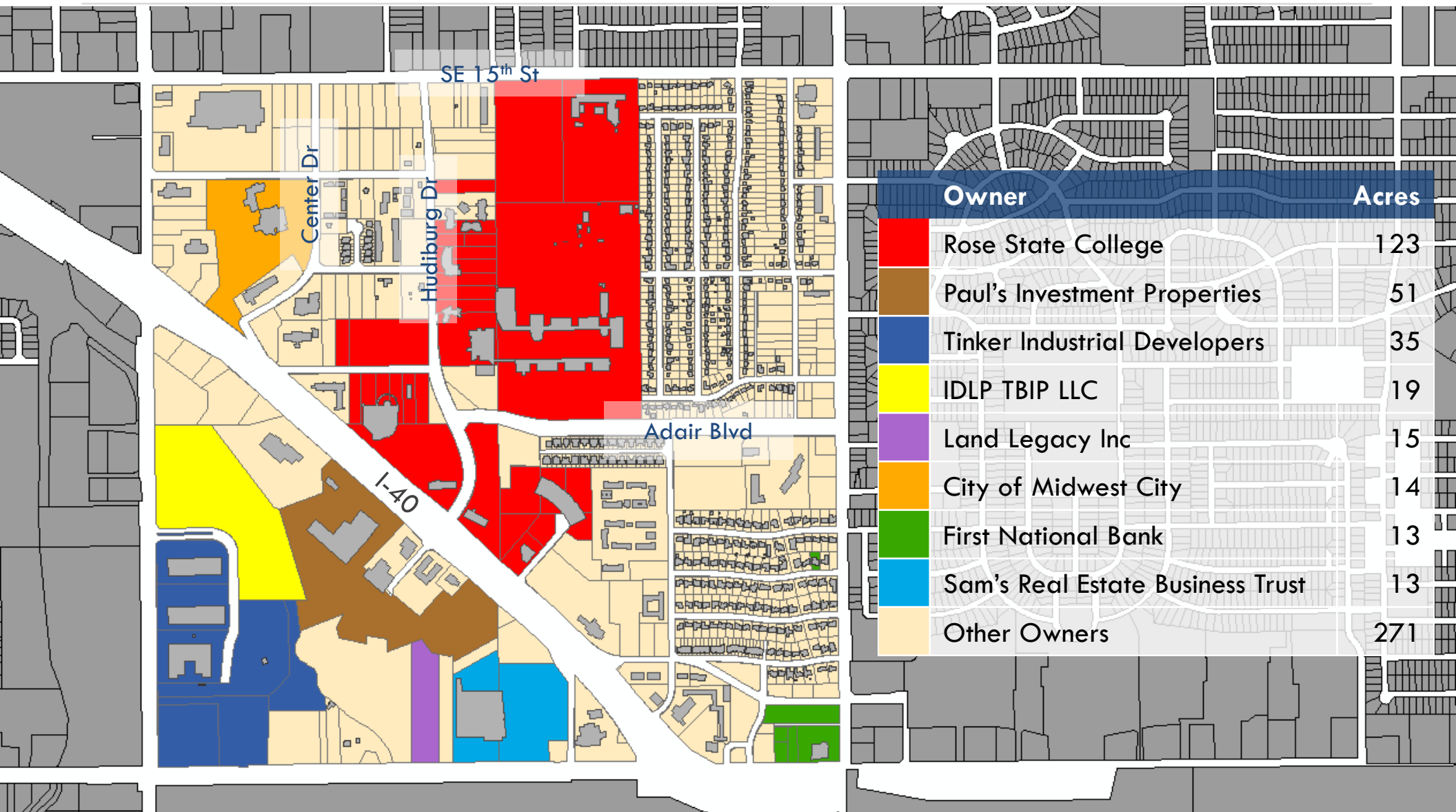
- What are the physical barriers that impede or discourage development?



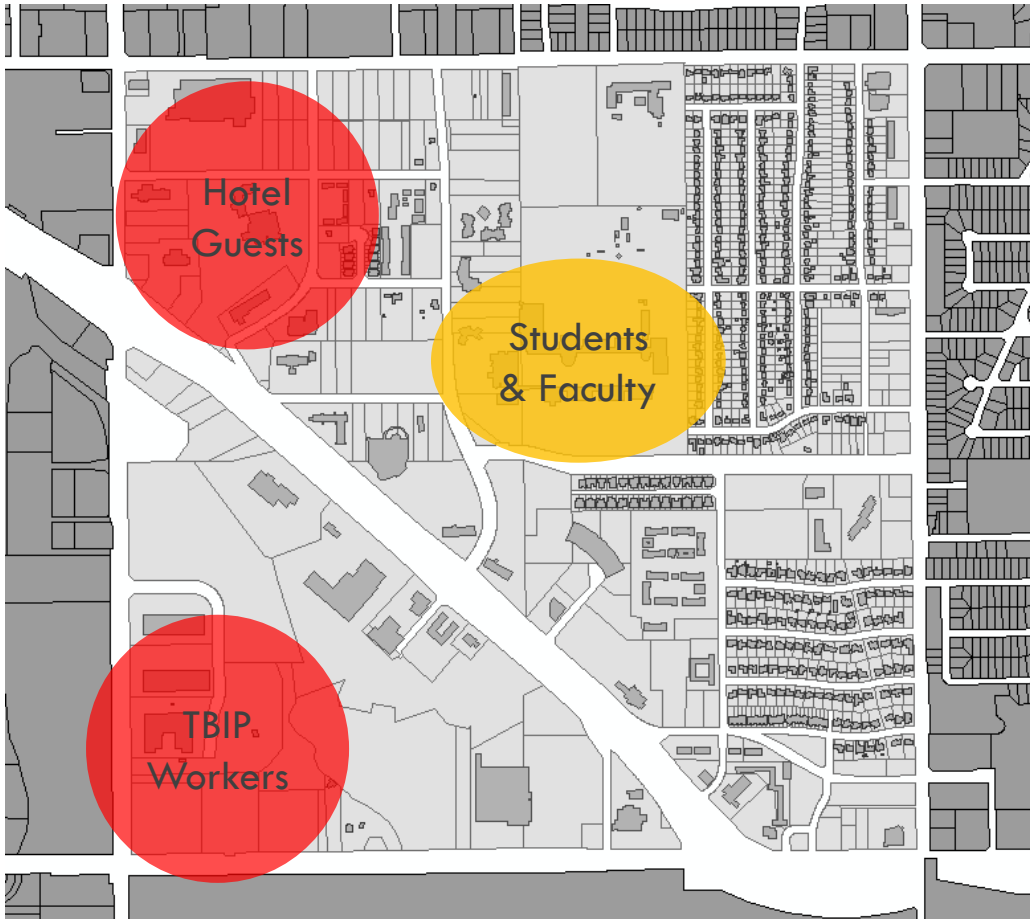
Tax-exempt entities – the City and Rose State College – control a substantial number of sites within the District.



The largest landowners are institutional actors with some private holdings near I-40.

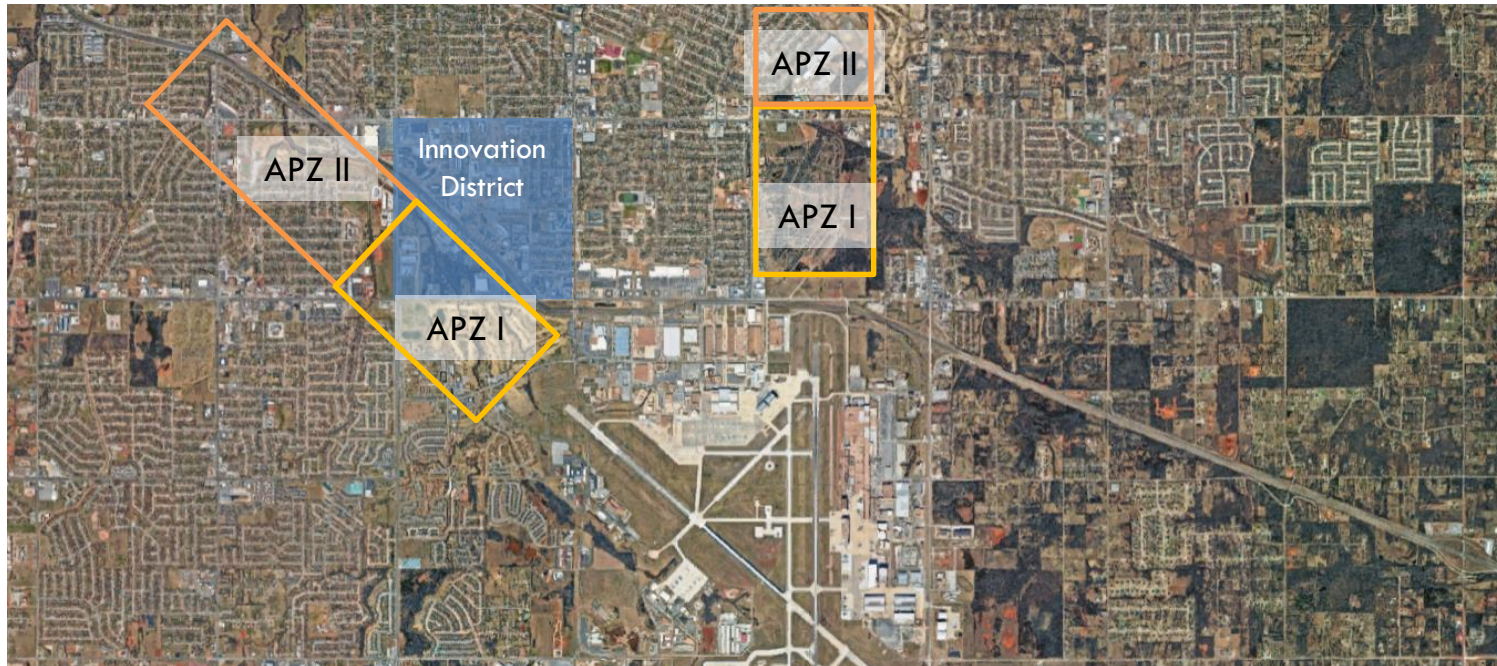


Within the District, existing residents, workers, and visitors can drive additional demand for new uses, including residential and restaurant uses.



- Rose State College **students and faculty** are potential target tenants for new residential units
- **Hotel guests and local office workers** could drive retail and food and beverage options and compliment existing and planned retail around the Innovation District

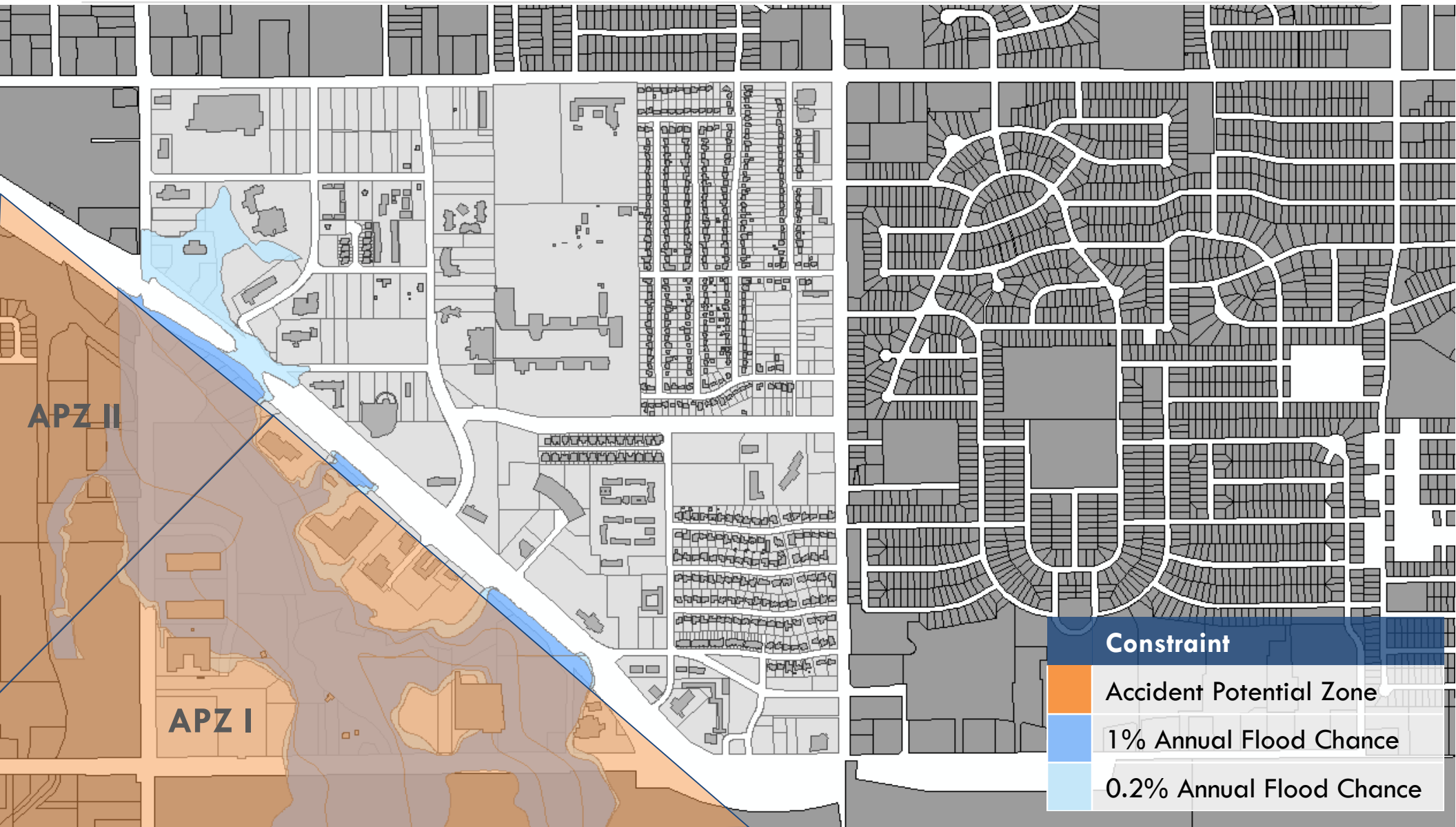
Accident Potential Zones (APZs) protect the public from noise and accident dangers, but significantly limit or restrict new development.



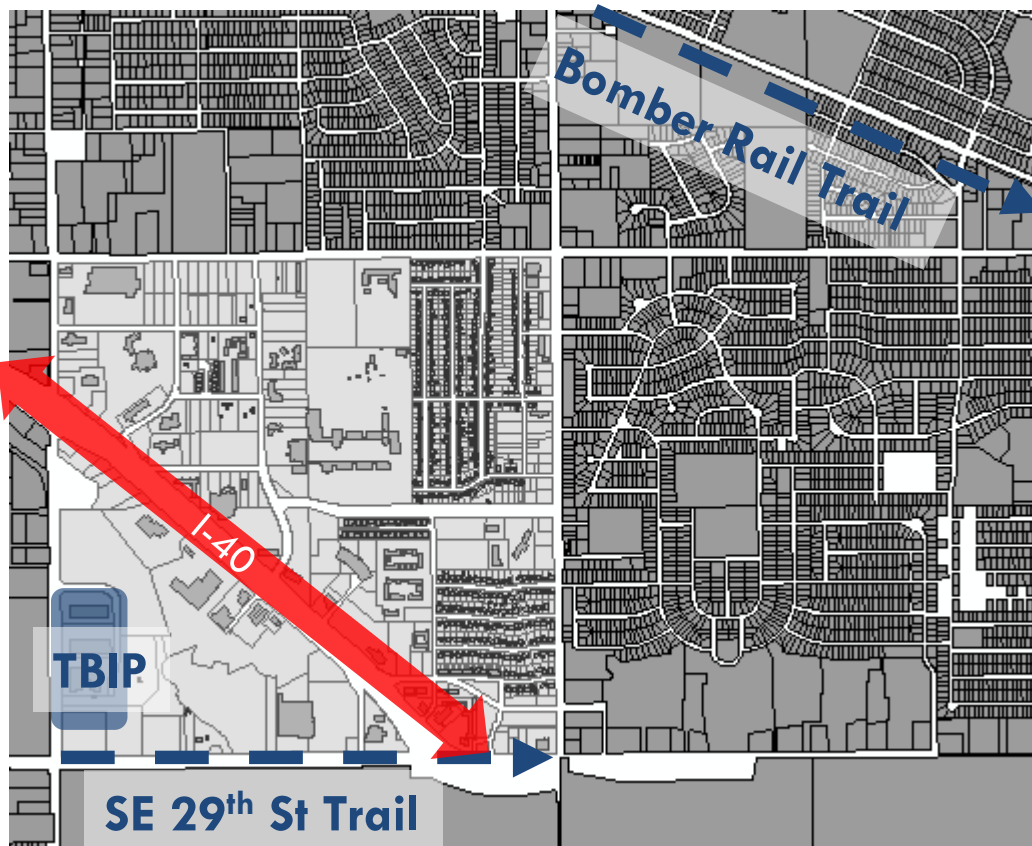
Use	APZ I	APZ II
Residential	No	Yes (1–2 units/acre)
Office	Yes (low-density)	Yes (low-density)
Retail	No	Yes (low-density)
Recreation	Yes (low-density)	Yes (low-density)
Public Amenity	No	No

Source: U.S. Air Force

Together flood plains and Accident Potential Zones south of I-40 are a barrier and could increase development costs, giving priority to sites north of I-40.

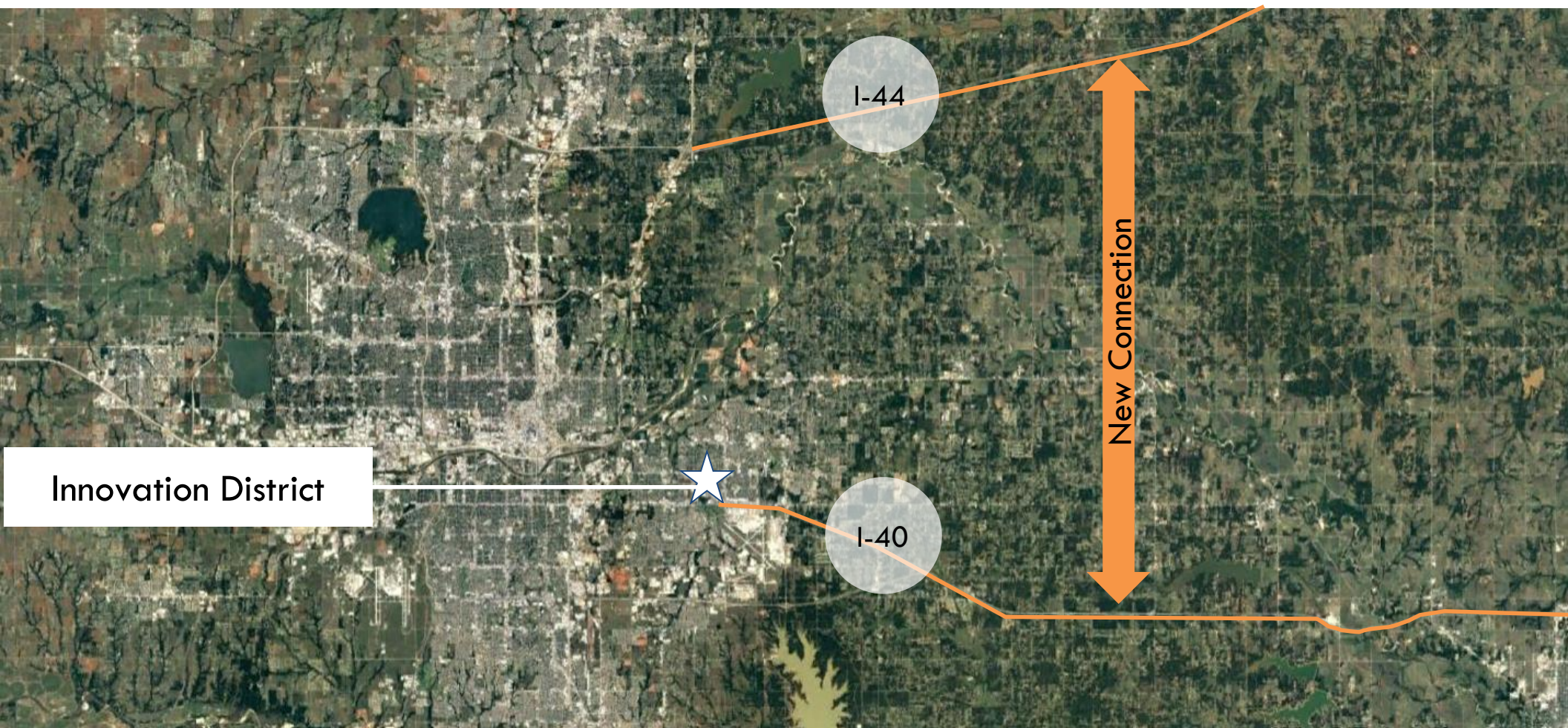


Plans for City investments in bicycle and pedestrian facilities could be leveraged to enhance the public realm and improve access in the District.

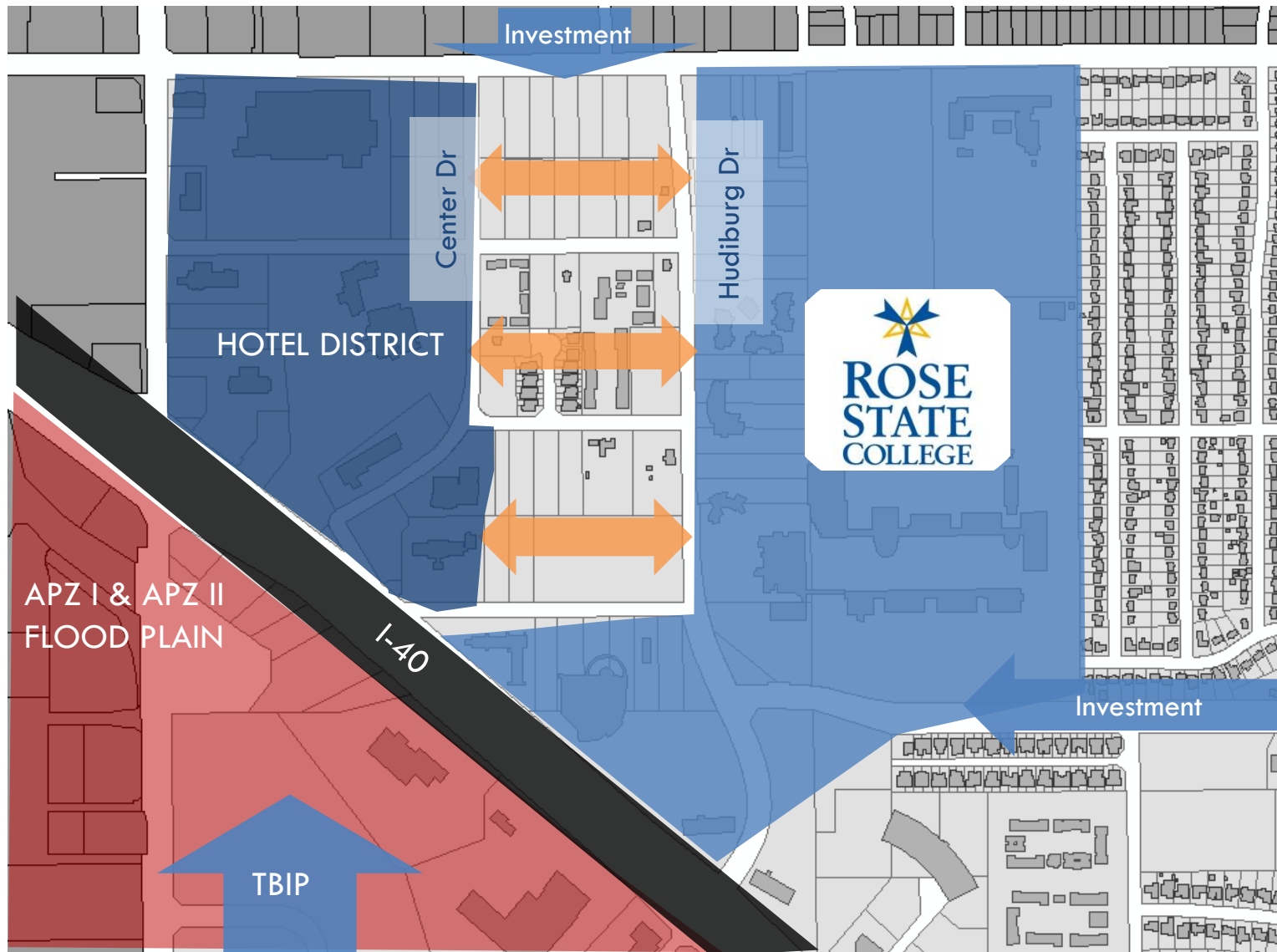


- Nearby bicycle and pedestrian investments like the **Bomber Rail Trail** and **SE 29th Street Trail** could integrate the Innovation District with the rest of Midwest City
- While I-40 can present an advantage, it creates an **imposing physical barrier** between the two sides of the Innovation District
- The Tinker Business and Industrial Park is a key Innovation District anchor. **Improved linkages across I-40 to the rest of the District**, such as a multi-use trail through the floodplain, should be considered.

The planned I-44 connection to I-40 east of Midwest City may alleviate local traffic concerns and more easily connect Midwest City to Northern OKC.



Connecting and activating the existing area between the Hotel District and Rose State could create the core of the future Innovation District.

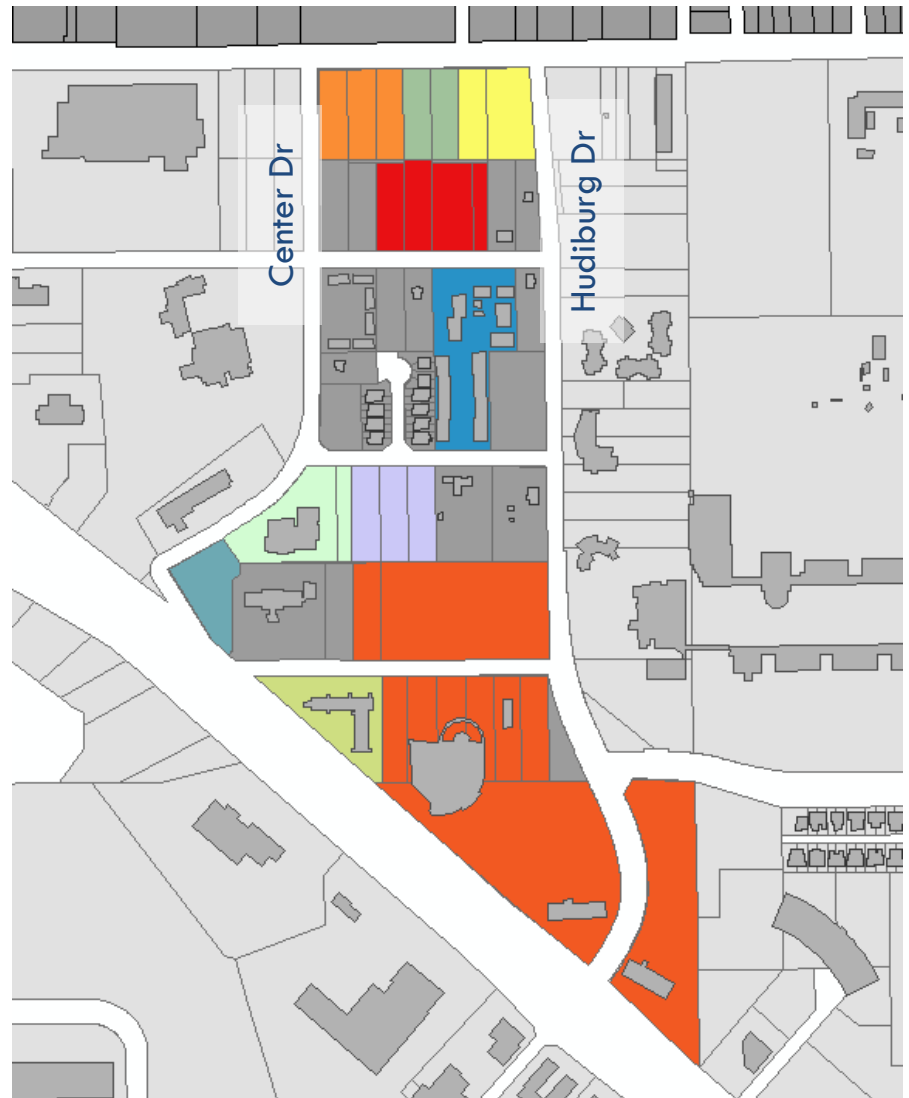


Vacant parcels along Will Rogers Road and Hudiburg Drive could be potential candidates for early redevelopment into convergent innovation center.



With the exception of Rose State College, land ownership is divided between LLCs and individuals.

Owner	Acres
Rose State College	22.5
Kim Hyun Jong & Yang	5.3
Benjamin Kennedy	4.2
Maxwell & Sherri Miller	3.7
Chestnut Square LP	3.7
JJ S Holding LLC	3.1
Will Rogers Premium Real Estate LLC	2.9
Dental Depot Of Midwest City LLC	2.9
Hilton 2 Suites	2.6
Kirit Bhakta	2.4



The priority focus area is almost entirely zoned for hospitality. New zoning would be required to develop new residential and office by-right.

