

# Employment Land Needs Assessment and Action Plan

The City of Oklahoma City

**ECONorthwest**  
ECONOMICS • FINANCE • PLANNING

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# TABLE OF CONTENTS

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<b>Table of Contents</b> .....	<b>i</b>
<b>Summary</b> .....	<b>iii</b>
<b>1. Background</b> .....	<b>1</b>
<b>2. Assessment methods</b> .....	<b>3</b>
<b>3. Demand for employment land</b> .....	<b>3</b>
<b>4. Supply of employment land</b> .....	<b>6</b>
<b>5. Findings and Recommendations</b> .....	<b>14</b>
Context.....	14
Findings and Recommendations.....	16
Institutional Arrangements.....	16
Development Opportunities .....	16
Site Readiness Assistance .....	17
PlanOKC.....	18
Infrastructure.....	22
Brownfields/Greyfields .....	24

## Technical Appendices

**Appendix A: Methods for Forecasting Demand for Industrial Land in Oklahoma City**

**Appendix B: Future Demand for Industrial Land in Oklahoma City**

**Appendix C: Preliminary Analysis of Land Supply**

**Appendix D: Expanded Analysis of Land Supply**

**Appendix E: Context for Policy Evaluation**



# SUMMARY

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## Purpose

The City of Oklahoma City and its partner organizations<sup>1</sup> seek to ensure an adequate supply of vacant and readily buildable land in large sites for large industrial and business developments. Such sites help the City attract new companies and accommodate the expansion of existing ones. In 2011-12, the City, its partner organizations, and consultants conducted a planning study aimed at quantifying and comparing the demand for, and supply of such sites and identifying actions to ensure a consistent supply of sites.

This summary highlights main points dealing with:

1. Demand for employment land in Oklahoma City over the next two decades;
2. Supply of land currently and potentially available to accommodate that need; and
3. Recommended actions to increase the supply of employment land.

## Findings about Demand and Supply

Though the city limits are large and much land is undeveloped, **little land is serviced, or consolidated in large sites** (50 to 500 acres). The critical issue facing the City is the scarcity of development-ready, large sites. **Obstacles affecting the supply of development-ready land** include:

- **Parcelization.** Land may be vacant but in small parcels with multiple owners.
- **Lack of infrastructure.** That lack is not absolute, but most sites evaluated need some service extensions or upgrades, and the estimated costs are high.
- **Market conditions.** Property owners and developers are often reluctant to hold and develop land for industrial uses. Land suitable and even zoned for industrial development has frequently been permitted to develop for other commercial or residential uses. This often exacerbates the loss by creating **conflicts from incompatible uses.**

The **historical and expected absorption** of industrial / business park land in the region *averages* 80 acres per year. In *any given year* the absorption

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<sup>1</sup> Partner organizations are listed in the report and include, among others, the Greater Oklahoma City Chamber of Commerce, the Alliance for Economic Development for Oklahoma City, the Oklahoma City Economic Development Trust, OG&E, and ONG.

has been and could be several times the average. To provide reasonable choice to the market, there should be an inventory of *development-ready* sites several times larger than the average annual absorption. These sites should be of various sizes (25, 50, 100, 500 acres) in different areas within the city limits. A perpetual **inventory** of 1,000 acres of development-ready land would provide for most opportunities the City might wish to pursue. Five hundred acres would be a minimum target.

## Categories of Actions

The possible actions the City can take to address these issues can be grouped in three broad categories:

- **Regulate.** The City can affect land supply and use by planning, zoning, the entitlement and permitting process, and policies for infrastructure provision (including timing and charges).
- **Encourage.** The City can provide incentives for desired types of land and development by adjusting certain regulations and fees, providing infrastructure in a timely and efficient manner, helping with land assembly, finding tenants, and more.
- **Acquire.** If property owners and developers are unable to assemble and protect large employment sites, the City or its partners could assemble and protect those sites.

Preparing sites for large employers is a process with several steps. This analysis focuses on the early steps that make sites development-ready.<sup>2</sup>

- Inventory land supply and potential sites;
- Develop a plan for how land uses might be best arranged to provide desired benefits and reduce negative impacts;
- Entitle parcels (land-use planning and zoning);
- Protect large parcels from further parcelization or alternative development (e.g., through zoning);
- Provide public facilities and services;
- Assemble sites (where parcelization has already occurred);
- Market sites to developers and end-users;
- Develop sites with buildings.

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<sup>2</sup> This study has not evaluated and does not make recommendations about the marketing and development of sites.

## Recommended Strategy

There are many ways to package actions to address the limited existing supply of large, development-ready sites. Some actions may require changes to long-standing policies and institutional procedures. Assembling the right strategy is as much a political exercise as a technical one. This report's recommendations are based on its technical findings and the professional experience of the consultants with other cities. Policymakers will need to determine which of the suggested actions are appropriate in Oklahoma City.

This report addresses several actions that the City might take. Some actions may require coordination with the City's partners to encourage actions on their part consistent with the City's objectives. The business community and elected leadership will need to work together to implement the final action plan.

## Institutional Arrangements

Regarding the creation and development of employment land in Oklahoma City, there is a well-understood division of responsibilities among the key agencies: the City (land-planning, permitting, and infrastructure), the Greater Oklahoma City Chamber of Commerce (recruitment, expansion, and marketing), and The Alliance for Economic Development and its organizations (project development). Those arrangements seem to be working well; no changes are suggested.

## Development Opportunities

The recommendations in later sections address institutions and policies. The recommendations in this section address specific sites:

- 1. Focus efforts to create development-ready sites in high priority areas.** Section 4 of this report shows areas of the City rated on "development readiness" and provides a short-list of priority areas the City can focus on to begin development of a site inventory.
- 2. Expand partnerships by teaming with the State School Land Trust and the Airport Trust,** both of which own key employment land sites.
- 3. Conduct a market analysis for a business park.**
- 4. Pursue public purchase or optioning of key properties.** If property owners and developers are unable to assemble and protect large employment sites, the City or its partners should assemble and protect those sites with purchase or options.

## Site Readiness Assistance

5. **Prepare an industrial assistance tool kit** that can be used to make sites meeting established conditions development-ready;
6. **Task the Oklahoma Industries Authority and/or the Oklahoma City Industrial and Cultural Facilities Trust to manage the tool kit and coordinate with appropriate partners.**

## PlanOKC

A primary role of the City in the supply of employment land is planning and zoning. The ongoing update to the City's comprehensive plan makes this an ideal time to address issues related to land use policy and regulation. The findings suggest the following recommendations:

7. **Identify and designate key employment areas.** *This step is essential and clearly within the scope of planokc.*
8. **Strengthen the requirements for development to be consistent with planokc.** In Oklahoma City, the plan has historically been viewed as advisory. Properties are often approved for rezoning contrary to the plan. If the City wants development to conform to the vision planokc provides, it should give the plan more authority. In cases where a new plan designation and an old zoning designation are inconsistent, the plan designation expresses the public purpose, and the zoning must change to implement that purpose.
9. **Strengthen requirements enforcing zoning implementation.** Actions include:
  - 9.1. **Require that all land zoned industrial be developed for industrial uses, or** create a zoning overlay for key employment areas;
  - 9.2. **Provide greater protection in agricultural zones to protect and reserve land for later development;**
  - 9.3. **Designate and rezone additional land for employment uses.** Zone to preserve land identified by planokc as the best areas for future industrial expansion;
  - 9.4. **Use planokc and zoning to buffer employment land from incompatible uses,** while increasing compatibility by using design standards;
  - 9.5. **Apply caveats to provision of infrastructure to limit the allowed use of designated employment land to employment uses;**
  - 9.6. **Strengthen guidance to and authority of the Planning Commission** in making development decisions consistent with City desires and policy for employment land; and



- 9.7. **Require City departments to consider the land use and economic development objectives of planokc when developing their capital and operational plans.**

## **Infrastructure**

One of the strongest tools available to the City and its partners for assisting the private sector to develop large employment sites is infrastructure provision and pricing. The City should:

10. **Provide infrastructure in a timely and efficient manner to accomplish large-site inventory objectives;**
11. **Develop a capital improvement plan consistent with and driven by planokc;**
12. **Adopt an impact fee ordinance for off-site system costs; and**
13. **Mitigate inefficient and inappropriate development (that negatively impacts employment land goals) through planokc policies.**

## **Brownfields/Greyfields**

14. **Acquire/control and remediate brownfields and greyfields to build employment land inventory.**



# 1. BACKGROUND

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The primary jobs created on industrial land are critical to Oklahoma City's economic stability and future growth. However, despite the fact that Oklahoma City has a very large land area, it has had recent difficulty recruiting large companies due to a lack of suitable sites. Key challenges include fragmentation and encroachment caused by unchecked residential development, and lack of infrastructure in strategic locations. In addition, competing cities and regions have become more aggressive in their efforts to attract companies, necessitating a stronger, more organized approach from Oklahoma City. Unlike some competing cities, Oklahoma City does not have an active government or quasi-government entity charged with assembling land on a citywide basis, and the City has no large industrial parks with sites waiting for tenants.

The City has been unable to capitalize on numerous recent opportunities to recruit companies because suitable sites were not available. The City recognizes that serviced, developable industrial land is a necessary component of economic development. Without suitable sites, the City is at a competitive disadvantage.

For some time the perception that there was abundant industrial land in the City led to a passive attitude regarding employment land assembly. The City realizes that the former approach is not effective in the current global marketplace. Rather, those regions that are engaging in proactive and coordinated efforts to assemble, prepare, and market land are better able to expand their economies and secure new opportunities for their citizens.

The City, The Greater Oklahoma City Chamber of Commerce, and The Alliance for Economic Development of Oklahoma City recognize that today's global marketplace involves development-ready sites, incentive packages, and aggressive marketing. The City and these partners are working together to provide coordinated and effective leadership and management of economic development efforts. The goal is to make it easy for companies to locate (or remain) in the city by providing them with a choice of multiple, excellent sites with infrastructure already in place. This plan lays the groundwork for the achievement of this goal.<sup>3</sup>

## **This document summarizes an assessment of:**

- 1. Demand for employment land for Oklahoma City between 2010 and 2030;**

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<sup>3</sup> Funding for the project was provided by the Oklahoma City Economic Development Trust and by an Economic Adjustment grant from the U.S. Department of Commerce Economic Development Administration. This Economic Adjustment Project was accomplished by the City of Oklahoma City under Economic Development Assistance Project No. 08-86-04550. The statements, findings, conclusions, recommendations, and other data in this report are solely those of the contractor and do not necessarily reflect the views of the Economic Development Administration.

2. **Supply of land currently and potentially available to accommodate that need; and**
3. **Actions the City could take to increase the supply of employment land.**<sup>4</sup>

Detailed reports on supply, demand, and policy options can be found in Appendices A through E.

For the purposes of this project, employment land is defined as land that is suitable for independent industrial uses, industrial parks, warehousing, and some types of office/business parks.<sup>5</sup> (Note that the terms “employment land” and “industrial land” are often used interchangeably in practice and in this report.)

Oklahoma City has been developing a response to economic challenges common to many central cities in the US: a loss of manufacturing jobs, difficulties recruiting large companies to expand in the City, and the conversion of employment lands to other uses (such as residential). The assessment in this report is part of the City’s response to these challenges.

A city can pursue many policies and investments to address the challenges mentioned above such as infrastructure improvements, workforce training, and marketing. This study addresses one additional and critical element of economic development: the need for an adequate and development-ready supply of buildable land – of the proper size, physical attributes, location, and price. Without suitable land there can be no buildings; without built space or the opportunity to develop additional space, employment growth is constrained. Thus, the City and its partners are pursuing a coordinated approach to assembling, preparing, and marketing employment lands.

This report has four additional sections:<sup>6</sup>

- Section 2, Assessment Methods
- Section 3, Demand for Employment Land

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<sup>4</sup> ECONorthwest was the lead consultant to the City, assisted by subconsultants Group Mackenzie, Lautman Economic Architecture Partners, IronWolf Community Services, and SAIC Energy, Environment, and Infrastructure. This consultant team had substantial and appreciated assistance from many sources: the Planning and Utilities Departments at Oklahoma City, the Greater Oklahoma City Chamber of Commerce, the Oklahoma City Economic Development Trust, the Alliance for Economic Development for Oklahoma City, OG&E, ONG, and numerous professionals knowledgeable about local real estate and development. Funding for the project was provided by the Oklahoma City Economic Development Trust and by an Economic Adjustment grant from the U.S. Department of Commerce Economic Development Administration.

<sup>5</sup> This definition excludes most development for employment that is either (1) strictly office-based (finance, insurance, real estate, services, government, etc.) and (2) retail.

<sup>6</sup> The full technical report, with several technical appendices, is available from the City.

- Section 4, Supply of Employment Land
- Section 5, Policy and Recommendations

## 2. ASSESSMENT METHODS

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The fundamental question for any assessment of land need is: “How well does the supply of land match the expected demand for that land?” The demand for employment land derives from a demand for built space to accommodate business activity. The estimate of land supply for employment purposes should consider whether land is (1) vacant, (2) buildable, and (3) suitable (e.g., in a location that makes sense to the market, at a reasonable price).

Three steps are needed to forecast future employment growth and employment *land demand* in Oklahoma City:

1. Forecast average employment growth over the long run, in the aggregate and by industry sector
2. Allocate forecasted employment growth by industry sector to building types, and assign employment densities to building types
3. Forecast future consumption of employment land as a function of the results of steps “1” and “2.”<sup>7</sup>

Regarding *land supply*, the assessment estimated the supply of vacant, large sites based on the characteristics of the land (e.g., parcel size), physical constraints (e.g., slope, location in a floodway), proximity to other industrial land, and availability of infrastructure.

## 3. DEMAND FOR EMPLOYMENT LAND

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The City wants to ensure an adequate supply of development-ready sites to attract and retain businesses. The City’s Comprehensive Economic Development Strategy emphasizes the need to retain and grow existing businesses and targeted clusters: bioscience, renewable and alternative energy, aerospace, distribution, and manufacturing.

Trying to match industrial sectors to specific site types and sizes of parcels may make sense for some targeted industries. But for the large majority of industrial sectors, it makes more sense to have a range of

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<sup>7</sup> ECO crosschecked its conclusions against a direct forecast of land absorption based on historical rates of absorption in Oklahoma City over the last decade.

readily-buildable sites of different sizes in different locations. A variety of sites in the inventory greatly increases the city's competitive edge.<sup>8</sup>

Oklahoma City is likely to grow in all industrial sectors. Demands for building and land characteristics will differ amongst these sectors. Small sites will suit most of them, and many will lease existing space rather than build to own. Those businesses are important to the economy, but most of their needs can be met in smaller industrial and office developments that the Oklahoma City market has been able to deliver.<sup>9</sup>

This assessment, therefore, focuses on *the needs and demand by large employers for large, vacant sites*. There is a critical distinction between (1) average acres of annual absorption of industrial land, and (2) acres of development-ready land needed and available now and on an ongoing basis so that industrial growth is not constrained by a lack of suitable sites. The supply available in any given year must be larger than annual average absorption because there must be some choice in the market for it to operate efficiently. Moreover, the amount of absorption in a boom year may be two to three times the annual average absorption.

This assessment takes a long-run perspective on economic conditions and does not attempt to predict the impacts of short-run national business cycles on employment or economic activity. Some of the implications of these trends on the forecast of Oklahoma City's industrial land needs are:

- Population and employment in Oklahoma and Oklahoma City are expected to grow for the foreseeable future.<sup>10</sup>
- Industrial employment has been growing slowly, and even declining in some cases, but State forecasts are for moderate growth.
- Despite structural shifts in the economy and changing business practices, as population and employment grow, the need for industrial sites to serve expanding and growing companies will remain.

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<sup>8</sup> The experience of the Chamber of Commerce with successful and unsuccessful recruitment suggests that there is an ongoing demand for large sites in the industrial land inventory, from demand for 20 acre sites to demand for sites as large as 2,500 acres.

<sup>9</sup> The issue about larger parcels can, however, affect them indirectly: many might like smaller, leased spaced in industrial and office parks, and the developers of such employment parks need larger parcels.

<sup>10</sup> In the US, consensus forecasts about the speed of recovery from the most recent recession have been continually adjusted downward. Federal budget and consumer debt problems exacerbate structural economic problems. Nonetheless, all mainstream forecasting bodies expect the US economy to grow, just more slowly. And the economic downturn is not affecting all sectors and all locations equally. There is evidence of pent-up demand nationally. And housing, employment, and banking conditions all seem better in Oklahoma City than the US average.

Given these considerations and others described in this report, the consultants believe the long-run forecasts for growth of population and employment undertaken by the responsible agencies are justifiable.<sup>11</sup>

Those forecasts were inputs to a demand analysis for employment land that concluded:

1. Average annual absorption of industrial land<sup>12</sup> in Oklahoma City will be on the order of 70 to 90 acres per year<sup>13</sup>
2. To provide reasonable choice to the market, there should be an inventory of *development-ready* sites in various sizes (25, 50, 100, 500 acres) in different areas within the city limits that is several times larger than the average annual absorption.

The key issue for this assessment of employment land policy is having an adequate supply of larger sites for larger businesses (expansions and recruitment) and industrial and office parks. Technical appendices to this report describe site needs for larger employers by type of industry (e.g., warehousing, manufacturing) and conclude that the City would be in good shape for retaining and recruiting new industrial businesses if it had at least two, and preferably three sites, in each of three size classes (25, 50, and 100+ acres) for each of at least two broad user types: (1) warehousing / traditional manufacturing, and (2) high tech / research / office park).

Collectively, that means to be competitive, the City needs around 1,000 acres of land that is development ready (ground could be broken in six months to a year) in sites of 25 acres or greater with the greatest focus on sites 100 acres or greater. This could be perceived as a lot of land to have ready to go, especially if the City has to acquire some properties or provide backbone infrastructure to land that now lacks it. The City would still be reasonably well placed with about 500 acres. Anything less than 500 acres is too tight for a city with the size and aspirations of Oklahoma City.

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<sup>11</sup> In fact, it would complicate planning to assume otherwise and then be unprepared to deal with growth.

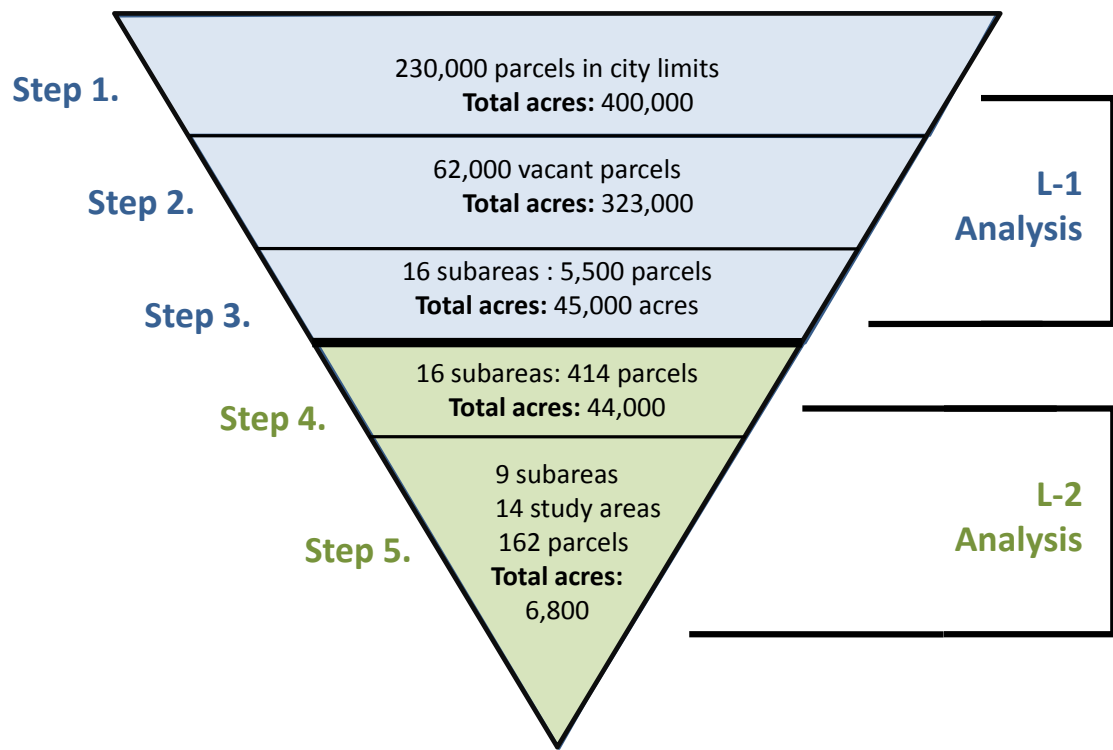
<sup>12</sup> Which will accommodate growth in employment typically thought of as industrial (e.g., manufacturing or warehousing) as well as other employment that use employment land as defined in this study (e.g., publishing, professional, scientific, and technical services, management & admin).

<sup>13</sup> Total employment is estimated to grow at an average annual rate of 1.0% from about 376,000 employees in 2008 to 473,100 in 2030, an increase of nearly 97,100 employees. Of the four employment sectors most frequently defined as industrial, construction is projected to see the fastest average annual growth at 1.9%. The other three (manufacturing, wholesale trade, and transportation and warehousing) are all expected to grow at 0.6% or less annually. Estimates are based on a composite employment forecast created using the State of Oklahoma's long-term industry employment projections and the Greater Oklahoma City Chamber's 2011 Economic Forecast. See full report for details and citations.

## 4. SUPPLY OF EMPLOYMENT LAND

The analysis of employment land supply began with an inventory of all parcels within city limits (over 230,000 parcels). The analysis then systematically worked toward parcels most suitable for large-site employment development by using various data sources to screen out less suitable parcels. Figure 1 summarizes the filtering process by which the project team went from 230,000 parcels and 400,000 acres (total in city limits) to 162 parcels and 6,800 acres (the study areas).

**Figure 1: Methods for Land Supply Evaluation (Levels 1 and 2)**



Source: Group Mackenzie

Note: The screening was done in two stage: Level 1 (L-1) and Level 2 (L-2). See appendices for detail.

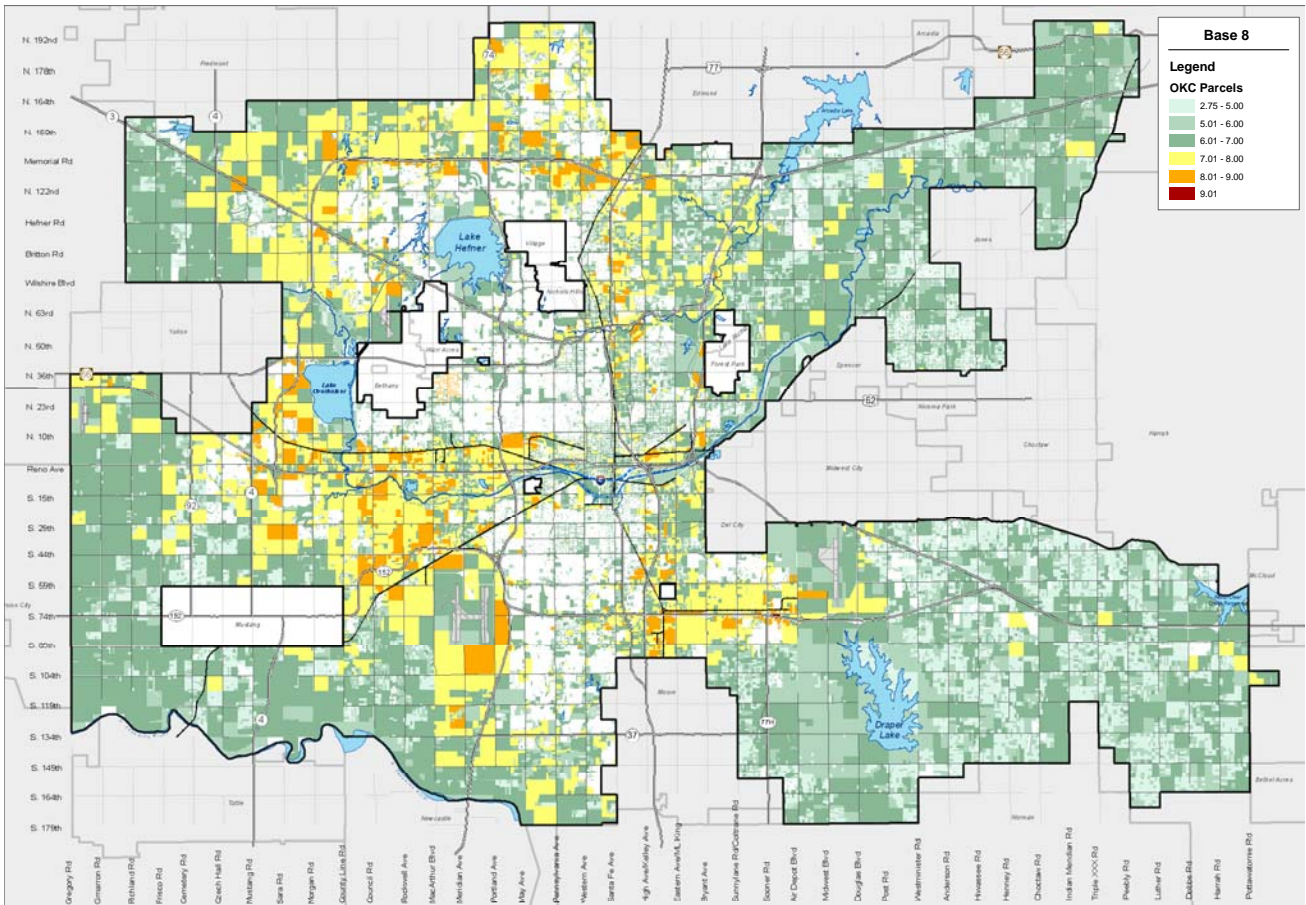
Parcel characteristics used for the first screening included location outside city limits, already developed (not vacant) if not zoned industrial, size smaller than one acre, location in a floodway, and (the biggest category) residentially zoned parcels smaller than five acres. A second screening used characteristics that influence a parcel's suitability and readiness for development (e.g., distance to concentrations of employment and population, distance to backbone infrastructure).

These methods reduced the 230,000 parcels to 5,500 parcels (45,000 acres) in 16 subareas (Figure 1, Step 3). Figure 2 shows the average weighted scores for all parcels that survived the initial selection process. Green parcels scored lower, with lighter shades indicating lower scores.



Scores increase as colors progress through yellow and orange, with orange parcels scoring the highest.

**Figure 2: Average weighted scores by parcel**

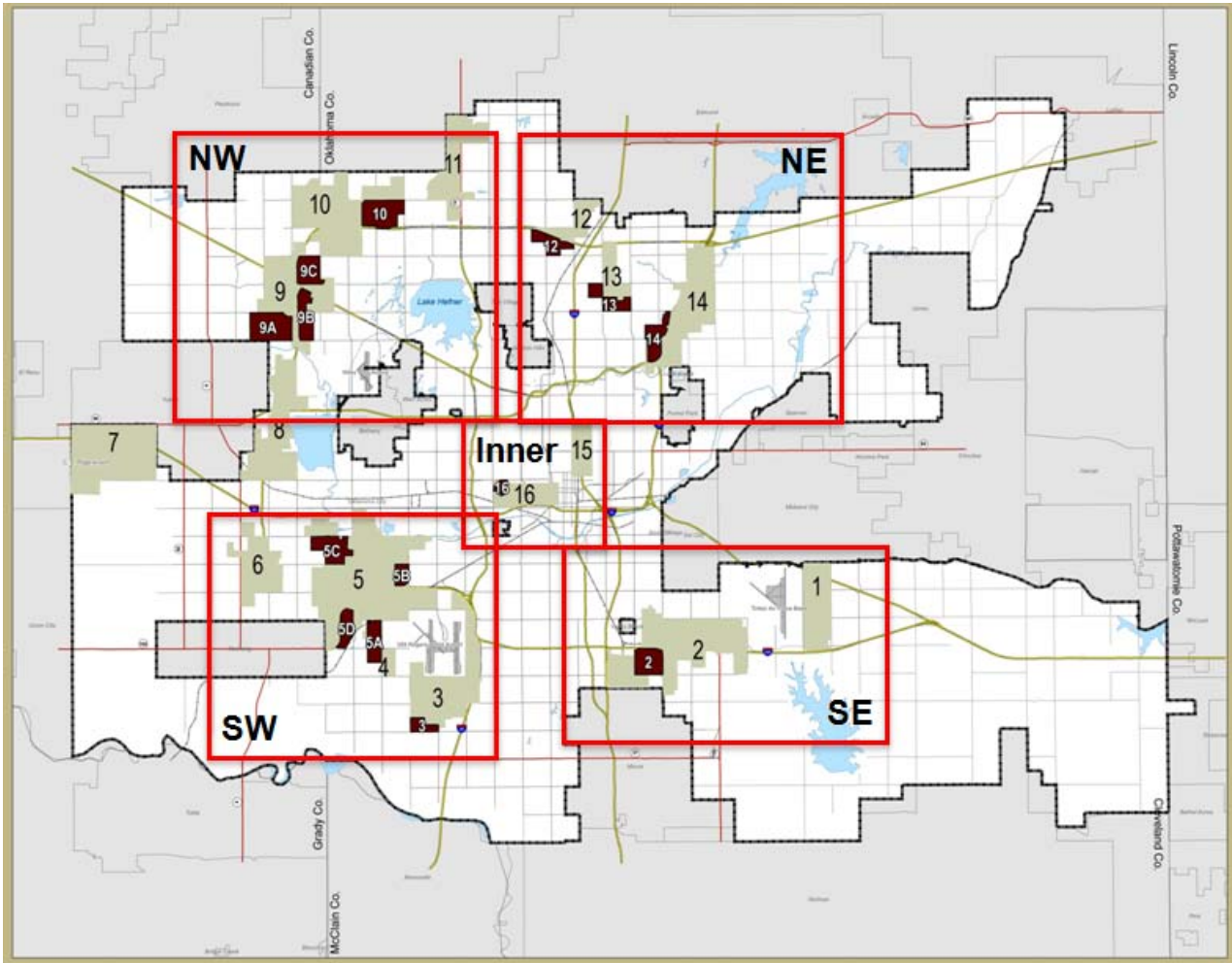


Source: Based on scores and weights used in the “preferred scenario” of the technical evaluation.

The analysis identified 16 **subareas** with parcels (1) greater than 50 acres, and (2) with an average weighted score on site suitability characteristics of 7 or greater. From these it did more screening to identify 14 **study areas** for detailed analysis (comprising 168 parcels and 6,800 acres (of which 6,300 were classified as net developable), and ranging in size from 161 acres to 923 acres).<sup>14</sup> That subset of parcels was deemed to be among the most likely for future, larger-scale industrial development. Figure 3 shows the subareas, study areas, and quadrants (which were defined for the purposes of summarizing the data).

<sup>14</sup> The Level-2 screening started with parcels larger than 50 acres in size, and with a score of 7.0 or greater in the preliminary analysis. These 414 parcels were further screened, with preference given to those that (1) were vacant, (2) had reasonable access/proximity to existing infrastructure, (3) were adjacent to industrial development and not adjacent to current or likely future residential development, (4) lacked physical or environmental constraints, (5) had public and consolidated private ownership.

**Figure 3: 16 Subareas; 14 Study Areas; and 5 Quadrants**



Source: Group Mackenzie

Note: Grey = not in City; Red boxes = quadrants; Light green = Subareas; red = Study Areas

Table 1 summarizes key information for each study area. It shows a diversity of parcel sizes, number of owners, and planning and zoning designations.

For each study area the project team did a detailed evaluation of infrastructure. Staff at the City and the Greater Oklahoma City Chamber of Commerce created a profile of expected build-out by industry type for each study area. Those profiles described (1) the expected mix of uses, by study area (e.g., heavy industrial vs. warehousing), and (2) the expected demand for infrastructure (water, sewer, electricity, gas, roads), per acre or built square foot, for each use. The profiles allowed the project team to estimate the expected infrastructure demand for full build-out for each study area.<sup>15</sup>

<sup>15</sup> The industrial profiles were based on the State of Oklahoma's Site Ready Certification Program.

**Table 1: Summary of study area characteristics**

Study Area	Gross Acres	Net Acres	Number of Parcels & Owners	Zoning	Comprehensive Plan Designation
2	582	460	1; 1	I-2; I-1	Standard Industrial
3	239	187	2; 2	I-2	Industrial
5A	456	452	4; 3	AA, I-1, I-2	Industrial; Urban Dev.
5B	240	223	1; 1	I-2	Industrial
5C	635	571	36; 10	R-1, I-2, AA	Industrial; Urban Dev.
5D	359	316	6; 4	AA, R-1, R-2, C-3, I-2, C-1	Urban Dev.
9A	915	862	7; 7	I-2, AA, AA(SP) R-1	Urban Dev.
9B	511	510	14; 13	I-2, C-3, O-2, R-1, AA	Urban Dev.
9C	522	510	13; 10	AA	Urban Dev.
10	821	810	10; 7	R-1, C-3, R-4, O-2, I-1, R-4M, O1	Urban Dev.
12	403	392	10; 5	I-1, C-3	Protected Industrial; Standard Industrial
13	445	436	13; 8	R-1, R-4	Transportation, Communication, Utilities/Urban Development
14	506	496	42; 34	R-1, I-1	Urban Dev.
16	106	80	3; 3	I-2, I-1	Standard Industrial/Urban Development
<b>Total</b>	<b>6,800</b>	<b>6,300</b>	<b>162; 108</b>		

Source: Group Mackenzie, January 2012.

Note: Zoning categories are listed in order of land area with the zoning category with the most land area listed first.

Because each study area comprised multiple industry types, the total infrastructure demand was a composite value reflecting the contribution of each industry type in a study area to the demand for infrastructure. The infrastructure demands developed using this method represent the anticipated demands for the *full build-out* of each study area, given the assumptions about the mix of industrial uses. Local infrastructure service providers each evaluated the requirements of full development on infrastructure systems.

The results of this analysis indicate that the costs of providing utility service to new industrial developments will vary widely across the City. The primary infrastructure costs are associated with the transportation, electrical power, and water systems. Table 2 shows the total build-out infrastructure costs for all 14 study areas assuming the market demand profiles that were used in the study. Table 2 also shows those costs on a per-acre basis.

**Table 2: Infrastructure costs, by type, for build-out, by study area**

Study Area	Net Developable Acres	Water	Sewer	Transportation	Power	Natural Gas	Total Costs	Rank on Total Cost (1 = Low)
<b>Study Area Costs: Total (in millions)</b>								
Area 2	460	\$0.7	\$0.4	\$9.9	\$10.5	\$0.8	\$22.3	7
Area 3	187	\$0.9	\$0.1	\$5.8	\$6.0		\$12.8	5
Area 5A	452	\$14.0	\$2.0	\$5.3	\$12.0	\$2.7	\$36.0	10
Area 5B	223	\$0.7	\$0.0	\$2.6	\$0.5		\$3.8	2
Area 5C	571	\$3.3	\$0.0	\$6.7	\$8.0	\$5.0	\$23.0	8
Area 5D	316	\$17.0	\$0.0	\$3.7	\$12.0	\$3.8	\$36.5	12
Area 9A	862	\$11.3	\$8.3	\$19.6	\$3.5	\$6.5	\$49.1	13
Area 9B	510	\$9.6	\$3.7	\$11.6	\$6.0	\$5.4	\$36.2	11
Area 9C	510	\$0.6	\$1.4	\$11.6	\$6.0	\$4.9	\$24.5	9
Area 10	810	\$1.5	\$0.0	\$47.3	\$7.0		\$55.8	14
Area 12	392	\$0.3	\$0.0	\$6.0	\$3.0	\$0.2	\$9.5	3
Area 13	436	\$0.0	\$0.0	\$8.1	\$4.5		\$12.6	4
Area 14	496	\$0.8	\$0.0	\$9.2	\$5.0	\$0.9	\$15.8	6
Area 16	80	\$0.1	\$0.0	\$2.3	\$0.0	\$0.0	\$2.4	1
<b>Study Area Costs: Per Industrial Acre</b>								
Area 2	460	\$1,542	\$914	\$22,662	\$23,983	\$1,827	\$50,928	7
Area 3	187	\$4,822	\$536	\$31,090	\$32,146	\$0	\$68,594	11
Area 5A	452	\$30,964	\$4,423	\$11,745	\$26,540	\$5,861	\$79,533	12
Area 5B	223	\$2,933	\$0	\$11,716	\$2,239	\$0	\$16,888	1
Area 5C	571	\$6,081	\$0	\$12,336	\$14,742	\$9,214	\$42,372	6
Area 5D	316	\$53,770	\$0	\$11,769	\$37,955	\$11,940	\$115,435	14
Area 9A	862	\$14,555	\$10,691	\$25,205	\$4,508	\$8,340	\$63,298	9
Area 9B	510	\$22,002	\$8,524	\$26,677	\$13,823	\$12,326	\$83,352	13
Area 9C	510	\$1,474	\$3,225	\$26,675	\$13,822	\$11,288	\$56,485	8
Area 10	810	\$1,752	\$0	\$57,188	\$8,456	\$0	\$67,395	10
Area 12	392	\$956	\$0	\$19,121	\$9,560	\$478	\$30,115	2
Area 13	436	\$0	\$0	\$26,544	\$14,739	\$0	\$41,283	5
Area 14	496	\$1,634	\$0	\$19,549	\$10,611	\$1,804	\$33,597	4
Area 16	80	\$1,281	\$0	\$29,730	\$0	\$0	\$31,011	3

Source: Group Mackenzie, January 2012.

Study areas 5B, 12 and 16 are both the lowest cost per acre study areas and the lowest total infrastructure cost study areas. Study area 14 has the fourth lowest cost per acre and the sixth lowest total cost. Study area 13 has

the fourth lowest total cost and the fifth lowest per acre cost. Looking at infrastructure costs, from either a total or a per-acre basis, study areas 5B, 12, 13, 14 and 16 are the lowest cost, based on the prospective study area land uses identified in this study.

Study area 16, which is located in the City’s Neighborhood Revitalization Strategy Area (NRSA), has the lowest overall infrastructure costs compared to all other study areas and has no indication of brownfield contamination based on the City’s brownfield inventory. This makes this study area a potentially advantageous site for the right type of user who could benefit from a more urban location.

The prospective study area land uses were identified by Chamber and City staff, who considered surrounding land uses and prospective company interests to identify the types of uses that could potentially develop in each of the study areas. These uses were also confirmed in the meetings held with the brokerage and development community, so they provide a market perspective to the analysis. Table 3 shows the distribution of potential uses by study area.

**Table 3: Prospective land use distribution by study area (acres)**

<b>Study Area</b>	<b>Total Acreage</b>	<b>Net Developable Acreage</b>	<b>Net Industrial Acreage</b>	<b>Heavy Industrial</b>	<b>Light Industrial</b>	<b>Business Services</b>	<b>Warehouse – Distribution</b>
Area 2	582.9	460.9	437.8	78.3	161.3	32.3	165.9
Area 3	239.2	186.7	186.7	18.7	74.7	0.0	93.3
Area 5A	464.9	452.1	452.1	113.0	144.7	22.6	171.8
Area 5B	229.4	223.3	223.3	0.0	134.0	22.3	67.0
Area 5C	645.1	571.2	542.7	57.1	228.5	0.0	257.1
Area 5D	363.3	316.2	316.2	126.5	79.0	31.6	79.0
Area 9A	922.9	862.7	776.4	0.0	258.8	258.8	258.8
Area 9B	518.2	510.7	434.1	0.0	102.1	178.7	153.2
Area 9C	523.1	510.7	434.1	0.0	102.1	178.7	153.2
Area 10	930.3	919.8	827.8	0.0	275.9	551.9	0.0
Area 12	407.0	392.2	313.8	0.0	78.4	117.7	117.7
Area 13	449.5	436.2	305.3	0.0	87.2	152.7	65.4
Area 14	514.9	496.0	471.2	0.0	124.0	99.2	248.0
Area 16	106.4	79.5	78.1	0.0	31.0	16.7	30.2

Source: Group Mackenzie, January 2012.

While the above discussion is based on the specific employment land use profiles assigned to the study areas, interpreting the results a different

way suggests that some regions of the city may be better suited to serve industry types with high utility demands.

For example, the Heavy Industrial and Light Industrial land use profiles have higher water, sewer, and power demands than other uses. These industries could be directed toward regions of the city that have available water, sewer, and/or power capacity, which may be reflected by low per-acre utility costs. Table 4 summarizes some possible pairings of industry types with study areas from the perspective of infrastructure cost minimization that could result in lower overall infrastructure costs.

**Table 4: Possible industry types and study area pairings**

<b>Industrial Use</b>	<b>Primary Utility Demand</b>	<b>Suggested Target Study Areas</b>
Heavy Industrial	Water, Sewer, Power, Gas	Study Areas 12, 13, 14
Light Industrial	Water, Sewer	Study Areas 2, 3, 10
Warehouse/Distribution	Transportation	Study Areas 5A, 5B, 5C, 5D
Business Services/Office Park	Transportation, Water, Sewer	Study Areas 5B, 5C, 12, 14

Source: Group Mackenzie, January 2012.

In addition to infrastructure costs and market interest, another factor that will influence future development opportunities is parcelization. Some of the study areas, such as 2 and 5B, are single-parcel, single-owner sites. Other study areas have significant numbers of parcels and property owners, making them potentially challenging to bring to market.

Overall, the study areas represent those areas where there is a concentration of parcels that provide the best opportunity for the City to have an inventory of sites in various acreages in the locations that meet both market demand and have a basic level of infrastructure and transportation assets that can be leveraged for development.

More detailed infrastructure and site analyses can determine development capacity, costs, ownership issues, and overall feasibility of preparing specific sites for development. But an obvious question is, Given the analysis that *has* been done, which areas look most promising? This study identifies infrastructure costs, market considerations, and parcelization/ownership patterns as critical factors in identifying subareas of the city for future industrial development. Current zoning may also play a role. Each of these factors provides a separate way to compare and rank the study areas. Table 5 uses these factors to identify study areas that may provide the top opportunity areas where larger industrial sites could be identified.

Study areas 2, 5B and 16 are the highest priority study areas that have the fewest number of property owners; the lowest (5B and 16) or relatively

low (2) infrastructure costs; and industrial zoning. Study area 14 has relatively low infrastructure costs but has a very high number of parcels and property owners, making aggregation likely in order to deliver larger sites to the market. Study area 13 has relatively low infrastructure costs and number of property owners but is zoned residential. Study area 5C provides an opportunity area, falling in the relative middle of both infrastructure costs and ownership and having a combination of industrial and residential zoning.

**Table 5: Priority study areas for further analysis**

<b>Study Area</b>	<b>Net Developable Acres</b>	<b>Total Infrastructure Cost Rank *</b>	<b>Total Infrastructure Cost per Industrial Acre Rank *</b>	<b>Number of Parcels</b>	<b>Number of Owners</b>	<b>Zoning</b>
<b>2</b>	582	7	7	1	1	I-2; I-1
<b>5B</b>	223	2	1	1	1	I-2
<b>5C</b>	571	8	6	36	10	R-1, I-2, AA
<b>12</b>	392	3	2	10	5	I-1, C-3
<b>13</b>	436	4	5	13	8	R-1, R-4
<b>14</b>	496	6	4	42	34	R-1, I-1
<b>16</b>	80	1	3	3	3	I-2, I-1

\*The study areas are ranked from 1 to 14, with 1 being the least expensive and 14 the most expensive study area. This ranking is used to compare total costs and total costs per acre for each study area.

Study area 16 is the only “inner city” area, and is within the boundaries of the City’s Neighborhood Revitalization Strategy Area (NRSA), which contains the majority of the City’s low-income census tracts and where City and federal housing programs are targeted. Business that employ low- to moderate-income workers and that locate in this area may qualify for more attractive financing than they could elsewhere in the city. Additional incentives (e.g., land assembly, training incentives, tax abatements, or payments / abatements for employing NRSA residents) could make the area more attractive. Because this site is surrounded by development, care should be taken to ensure it is targeted to user types that would fit the area.

In summary, the City has a beginning inventory of approximately 6,000 acres in the 14 study areas from which to create a large lot, development-ready inventory of sites. To make the land in the priority study areas development-ready, the City will need to implement a combination of infrastructure investments, aggregation strategies, and planning policies to prepare, reserve, and maintain it for industrial development and jobs.

## 5. FINDINGS AND RECOMMENDATIONS

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### Context

The focus of this study is *large sites for large employers*. As Table 5 suggests, sites may have to be assembled by aggregating parcels, and those parcels may have different owners.

Preparing sites for large employers requires several steps:

- Inventory land supply and potential sites;
- Develop a plan for how land uses might be best arranged to provide desired benefits and reduce negative impacts;
- Entitle parcels (land-use planning and zoning);
- Protect large parcels from further parcelization or alternative development (e.g., through zoning);
- Provide public facilities and services;
- Assemble sites (where parcelization has already occurred);
- Market sites to developers and end-users;

This analysis focuses on early steps necessary to achieve site readiness.<sup>16</sup> The City, the Chamber of Commerce, and The Alliance for Economic Development of Oklahoma City handle the large majority of public sector activities related to the planning and management of site readiness. Ample policy exists to support the goal of providing adequate employment land. In addition, broad support exists for developing policies and institutional arrangements to address issues related to employment land.

Three areas of land-use policy can have a significant influence on economic development: (1) land-use planning, zoning, and permitting; (2) cost and timely availability of infrastructure; and (3) the availability of large sites. The City has policy in all these areas:

- **Land-use.** The City is conducting several studies (including this one) to improve efficiency of land use, and the effectiveness of the zoning that implements the land-use plan.
- **Infrastructure.** The City is the lead institution for providing infrastructure to land. It has direct responsibilities for water, sanitary sewer, and transportation. It coordinates with private utilities for electricity and gas. Historically these organizations have not had major problems in providing infrastructure.

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<sup>16</sup> This study has not evaluated and does not make recommendations about the marketing and development of sites.



- **Availability of large sites and matching to demand.** This study has determined that large, development-ready, industrial sites are in short supply. The lack of sites has already proven detrimental and will continue to hinder the City's economy unless corrected. In general, public institutions in Oklahoma City are not as active in site assembly for employment land as in some other large cities. The Greater Oklahoma City Chamber of Commerce matches demand for large industrial sites to the existing supply of such sites, but it does not have the authority or funding to assemble those sites. The Oklahoma City Urban Renewal Authority (OCURA) does assemble and hold land for MAPS projects, the expansion of the OU Health Science Center, and various other redevelopment projects, but it does not have a city-wide or industrial-land focus. The implication is that site assembly for industrial land is primarily a private sector activity; however, the private sector is by nature impatient and unwilling to hold land for relatively infrequent large-site opportunities. This has led to the current scarcity of large sites.

Several departments and organizations support the City's economic development activities:

- The City's Planning Department and Economic Development Program (City Manager's Office)
- The Greater Oklahoma City Chamber manages by contract the Oklahoma City's economic development program.
- The Economic Development Trust is responsible for many of the City's tax increment districts, and oversees the City's Strategic Investment program, which focuses on the details of securing agreements between the public and private sector on various development projects.
- The Alliance for Economic Development of Oklahoma City provides staff support to the Economic Development Trust and manages several trust and tax increment districts for the City.
- The Airport Trust manages land holdings around Will Rogers World Airport (an area identified as having a relatively large supply of land that could be made ready for employment development).
- Private utilities for electricity and gas are critical players in the delivery of infrastructure that makes sites development-ready.
- The Oklahoma Industries Authority is a countywide trust for the industrial development of land. The Oklahoma City Industrial and Cultural Facilities Trust also has a mission related to economic development.

## Findings and Recommendations

There are many ways to package actions to address the limited existing supply of large, development-ready sites. Some actions may require changes to long-standing policies and institutional procedures. Assembling the right strategy is as much a political exercise as a technical one. This report's recommendations are based on its technical findings and the professional experience of the consultants with other cities. Policymakers will need to determine which of the suggested actions are appropriate in Oklahoma City.

This report addresses several actions the City might take. Some actions may require coordination with the City's partners to encourage actions on their part consistent with the City's objectives. The business community and elected leadership will need to work together to implement the final action plan.

Recommendations are categorized and numbered below. Detail and explanation follows each recommendation. Additional discussion regarding possible City action can be found in Appendix E. A condensed version of the recommendations section can be found in the Summary at the beginning of this document.

## Institutional Arrangements

It is sometimes the case that public-sector responsibilities for land supply and economic development are dispersed among many different organizations and individuals with competing interests and uncoordinated actions. That is not the case in Oklahoma City. There is a well understood division of responsibilities among the key agencies: the City (land-planning, permitting, and infrastructure), the Greater Oklahoma City Chamber of Commerce (recruitment, expansion, and marketing), and The Alliance for Economic Development and its organizations (project development). Those arrangements seem to be working well; no changes are suggested.

## Development Opportunities

The recommendations in later sections address institutions and policies. The recommendations in this section address specific sites. The City and its partners have ample opportunities to pursue in an effort to create a large lot, development-ready inventory of sites. To make the land development-ready, however, they will need to implement a combination of infrastructure investments, aggregation strategies, and planning policies to prepare, reserve, and maintain it for industrial development and jobs.

- 1. Focus efforts to create development-ready sites in high priority areas.**

As stated in Section 4 of this report, study areas 2, 5B and 16 are the highest priority study areas: they have the fewest property owners; the lowest infrastructure costs; and industrial zoning. Recommended infrastructure investments for each study area can be found in Appendix D.

- 2. Expand partnerships by teaming with the State School Land Trust and the Airport Trust.**

Public-public partnerships should be pursued with the State School Land Trust and the Airport Trust. Both of these entities own key employment land sites. The School Land Trust owns study areas 2 and 5B mentioned above as high priority sites. Unfortunately, state land disposition policies, such as the auction requirement and the desire to retain ownership through long-term leases make it difficult to include these properties in the development-ready inventory. The City should seek to overcome these obstacles through a partnership with the School Land Trust.

- 3. Conduct a market analysis for a business park.**

The Oklahoma City market for employment space is one that mainly builds for known users. There is little speculative development, and few business parks (e.g., Quail Springs). Other cities have examples of business and industrial park development where the private sector brings on space over a 20-year period. Whether that model would work in Oklahoma City takes more analysis than was done in this project.

- 4. Pursue public purchase or optioning of key properties.**

If property owners and developers are unable to assemble and protect large employment sites, the City or its partners should assemble and protect the sites. Urban renewal districts provide a vehicle for this type of site assembly. At the urban fringe, the City or its partners could acquire rural land in advance of the zoning and infrastructure investments that make the land more valuable.

## **Site Readiness Assistance**

- 5. Prepare an industrial assistance tool kit.**

The kit would be a bundle of resources used to make certain sites development-ready. The tools would be used only for those sites that meet conditions established by the City and its partners. Such tools could include for example, tax-increment financing, expedited city delivery of key infrastructure, and accelerated permitting. The recommendation here is to be

clear about what tools are available, under what circumstances, and how they work. Recommendations about specific tools are beyond the scope of this study.

**6. Task the Oklahoma Industries Authority (OIA) and/or the Oklahoma City Industrial and Cultural Facilities Trust (OCICFT) to help public and private entities create development-ready sites.**

These entities would manage the tool kit (previous point) and coordinate with other organizations critical to the development process. The OIA is limited to Oklahoma County, which means the OCICFT would be needed for sites in the other counties in Oklahoma City. Both entities are staffed and managed by the Alliance for Economic Development, which is well-positioned to coordinate between developers, the OIA, the OCICFT, the City, and other service providers.

## **PlanOKC**

A primary role of the City in the supply of employment land is planning and zoning. The current process to update the City's comprehensive plan makes this an ideal time to address issues related to land use policy and regulation. The findings suggest the following recommendations:

**7. Identify and designate key employment areas.**

The findings in this report provide a good foundation for that determination, and they can be supported by the retail and housing analyses being done as part of the planning process. *This step is essential and within the scope of planokc.*

**8. Strengthen the requirements for development to be consistent with planokc.**

A fundamental question about any comprehensive plan is whether it is advisory or controlling. In Oklahoma City, the plan has historically been viewed as advisory. Properties are often approved for rezoning contrary to the plan.

Cities with stronger planning policies view the plan as their best effort at getting citizen agreement on the desired future form of the city. Thus, they usually make the comprehensive plan a controlling document, and consider zoning a means of implementing the development pattern the plan describes. That means that in cases where a new plan designation and an old zoning designation are inconsistent, the plan designation expresses the public purpose, and the zoning must change to implement that purpose.

That policy is not an easy one to adopt. It may require for some a fundamental shift in philosophy about the public sector's role in land development. It requires a belief that regional and urban planning can make a beneficial difference: by getting public services efficiently to land that needs them for development, and by arranging land uses broadly so that neighborhoods and sub-areas of the City have greater amenity and less disamenity.

The public sector can influence land development patterns in other ways, such as through phased capital improvement programs (discussed below). But if there is no overarching agreement on and commitment (via investment priorities and enforcement) to a vision for overall development, it is harder to implement a capital improvement program or any other tool that might affect the location, pattern, and design of development.

#### **9. Strengthen requirements enforcing zoning implementation.**

It is common when a new comprehensive plan is adopted for (1) its new plan designations to be inconsistent with the zoning that implemented the old plan, and (2) for a city to ignore that inconsistency until there is a development application. At the time of such application, a city planning department and planning commission would look to see if the proposed development is consistent with the plan designation, and then would require and approve a change of zoning to something consistent with the plan and the proposed development.

In Oklahoma City now, however, it is possible for land designated in the plan as industrial to be zoned and permitted for non-industrial uses. There are several recent examples. It is also possible for land zoned industrial to be developed for non-industrial uses such as restaurants, retail sales, and services. Finally, it is also possible for land zoned as agricultural to be developed for relatively low-density residential uses that effectively eliminate the possibility of alternative or more intensive uses for at least 20 years, and in most cases much longer. The City can take several actions to address these issues:

##### **9.1. Binding zoning: require that all land zoned industrial be developed for industrial uses.**

This would be the strongest and broadest policy. A less comprehensive version of this policy would be to create a zoning overlay for key employment areas. This policy is potentially less controversial because it would apply

stronger controls in only some areas. Less restrictive yet would be to apply such an overlay zone just to rural land at the urban fringe that seems most suitable for industrial uses.

**9.2. Provide greater protection in agricultural zones to protect and reserve land for later development.**

The Oklahoma City limits contain more area than almost every city in the contiguous U.S.<sup>17</sup> And given the gentle topography and limited water bodies, most of that land is buildable, or would be if urban services were available. Much of the undeveloped land in the city limits is in some type of agricultural zoning, but that zoning allows low-density residential development, and market conditions and policies regarding roads and water extension support that kind of development.

A cursory review of current land use patterns in the city confirms that the concept of preserving rural land for future urban development has not yet been embraced by Oklahoma City. This is evidenced by the countless five-acre lots scattered throughout the rural areas of the city. These lots fragment the landscape and make it more difficult to develop urban uses in an efficient manner. In contrast, many other cities require that rural land remain rural until it can be developed at full urban densities with full urban services. This is commonly done by requiring large minimum lot sizes (20 to 40 acres) so that parcelization and rural residential development does not inhibit future urban development.

Oklahoma City's minimum lot size in agriculturally zoned areas is five acres: small enough that relatively expensive housing in certain areas could make more intensive urbanization of those areas very difficult. For example, if a 160 acre, agriculturally zoned parcel were subdivided into 5 acre parcels, the result would be 32 new parcels with 32 different owners. This effectively makes that land impossible to develop as an employment use, because the developer would have to negotiate with 32 property owners to obtain the 160 acres. If, on the other hand, the minimum lot size were 40 acres, only 4 properties would need to be purchased

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<sup>17</sup> At about 620 square miles, exceeded by Jacksonville, FL (874 square miles), but twice the area of New York City (305 square miles).

when the time came to develop the property into an, employment use.

An alternative way to achieve similar results is through policies about infrastructure extensions and pricing. Still another method would be to require that new development be contiguous with existing development as is done in Lincoln, Nebraska.

Since there is so much developable land in the city limits, it would be possible to allow large-lot residential development in some areas while having more restrictive policies in other areas designed to hold land in reserve for urban development at the appropriate time.

### **9.3. Designate and rezone additional land for employment uses.**

There is land at the edge of the urbanized area that is now agricultural and for which an “Industrial” classification would be an upzoning. Presuming that **planokc** identifies the best areas for future employment uses, then zoning to preserve this land for those uses would be appropriate. It would be more difficult to rezone land with or closer to basic services that is already zoned for a “higher” use (e.g., for residential or retail).

### **9.4. Use **planokc** and zoning to buffer employment land from incompatible uses.**

Employment uses can generate traffic, noise, and emissions, and spoil views. Most households prefer that their neighborhoods be relatively quiet, and free of traffic and contamination. Businesses know that residents typically oppose nearby industrial uses and so they avoid building near residences. Therefore, if new residential neighborhoods are scattered haphazardly throughout the City, a relatively small amount of residential development can have a negative impact on the ability to develop a large amount of employment land.

A primary solution to the problem is long-range land use planning of the type now occurring with **planokc**, which will allocate uses to appropriate places and in ways that reduce the amount of contiguity and conflict among incompatible uses.

**An ancillary solution is to use *design standards* to reduce spillover effects.** If the City pursues policies to reduce infrastructure costs by reducing the spread of

development, design standards that mitigate the negative impacts of density and spillovers should be considered as part of the package.

**9.5. Apply caveats to provision of infrastructure to limit the allowed use of designated employment land to employment uses.**

When major infrastructure is extended to allow specific properties to develop, the City would place a condition on the land (e.g., through a development agreement) limiting future development to employment uses. This policy could be applied instead of, or in addition to, zoning policies that limit use.

**9.6. Strengthen guidance to and authority of the Planning Commission.**

The City Council needs to give clear guidance and authority to the Planning Commission about how to make the day-to-day development decisions that are its obligation to make. The issues described above about, for example, fragmentation of employment land, appear to result from a lack of strong policy, not from inattention or alternative policy views by the Commission. The Commission's decision-making process could benefit from a checklist of things to consider and thresholds to measure against when rezoning applications are submitted for land reserved for employment uses.

**9.7. Require City departments to consider the land use and economic development objectives of planokc when developing their capital and operational plans.**

This would enable a more orderly and predictable development pattern, thus allowing for the proactive approach to infrastructure development discussed in the next section.

## **Infrastructure**

The City and its partners can reduce the cost of holding or developing land in several ways: by reducing fees, providing help with land assembly, and finding tenants. It can facilitate new development with funding and financing techniques, but the City and its partners are already well aware of these techniques and they are not part of the scope of this evaluation. One of the strongest tools available to the City and its partners is infrastructure provision and pricing:

**10. Provide infrastructure in a timely and efficient manner to accomplish large-site inventory objectives.**



The City and its partners should coordinate infrastructure development to different areas of the City and emphasize the need for large employment sites. Service providers in the city limits have historically done a good job of *responding* to requests for service from pending development. An alternative and commonly used approach in other cities is to be proactive. In other words, the City should guide development (especially employment land development) through the strategic installation of infrastructure, rather than allowing developers that do not coordinate either with each other or the City to drive where infrastructure is installed.

While the proactive method does require more City effort in understanding and planning for market needs as well as more discipline in adhering to infrastructure and land use plans, the benefits of proactive development are manifold and include:

- More efficient (i.e., lower installation and service costs) development patterns;
- Better information for real estate market participants, allowing for an easier development planning and approval process;
- A clear and defined link between land use and infrastructure development, allowing the Planning Commission and City Council to make more informed and timely land use and infrastructure decisions.

#### **11. Develop a capital improvement plan (CIP) consistent with and driven by planokc.**

Planokc will show a preferred pattern of development 20 to 30 years in the future. Arriving at that pattern requires the provision of infrastructure, especially roads, water, sewer, and electricity. Planokc should include a logical (cost-effective) plan for providing infrastructure. Using planokc as the starting point for development of the CIP will ensure the CIP is consistent with the type and location of development that the plan desires. Oklahoma state law requires that the CIP be consistent with the comprehensive plan, and the City has recently taken steps to ensure this consistency requirement is met. This effort to ensure consistency between the two documents should be further strengthened and institutionalized.

#### **12. Adopt an impact fee ordinance for off-site system costs.**

Identifying funding for needed infrastructure is always a challenge because there are always conflicting needs. *Impact fees* (also called “system development fees”) are a highly

popular and effective way to provide a dedicated revenue source for infrastructure in a particular area. Through impact fees developers pay for their development's share of local infrastructure costs. Such fees can be more efficient (or market sensitive) than property taxes or user fees because infrastructure goes where it is needed enough that the developers or users of the infrastructure are willing to pay something for it. Impact fees are also fair in the sense that development that is more distant and expensive to serve pays for that higher development cost. Conversely, those who choose to build in areas where infrastructure is less costly are rewarded with lower impact fees.

In contrast to other funding sources, Impact fees must be used for system expansion due to new development, not for catch-up or maintenance. They recover from development an estimated "fair share" of the costs of building off-site infrastructure. The use of impact fees for new infrastructure would allow the City more flexibility to use other sources of funds to deal with a backlog of system maintenance or level-of-service deficiencies.

**13. Mitigate inefficient and inappropriate development (that negatively impacts employment land goals) through planokc policies.**

The City Council should adopt both land use and infrastructure policies to ensure that haphazard development does not compromise the future supply of employment land. Because planokc will serve as the City's main policy document, it should clearly state the Council's intent with regard to the infrastructure-related items above.

## **Brownfields/Greyfields**

**14. Acquire/control and remediate brownfields and greyfields to build employment land inventory.**

It may take some time to secure the 500 - 1000 acres initially and over time the City will want a replenished portfolio of parcels. Brownfields (former industrial sites that require some clean up) or greyfields (obsolete office or retail space) could be purchased and cleaned up, or, through a public-private partnership, cleaned with public money with an agreement to build an employment land use on-site. Brownfields and greyfields offer various advantages; they:

- Are already served by most infrastructure;

- Are often closer in and more accessible for employees and suppliers/buyers;
- Are often in one ownership;
- May have existing structures suitable for at least partial adaptive re-use for industrially related purposes;
- May be covered by more redevelopment/economic development tools such as new market tax credits, federal brownfield funds, Community Reinvestment Act resources, HUD section 108, the Immigrant Investor Program (“EB-5”);
- May have viable partners for acquiring and controlling these sites (local or area trusts or foundations);
- When redeveloped can improve a blighted or otherwise underperforming area.

The biggest downside, of course, is the cost of cleanup (including liability), but in some cases, public acquisition can assist in addressing private owner liability by capping the private owner’s exposure.