

### **III. LAND USE PLAN**

#### **1. LAND USE PLAN OVERVIEW**

The main objective of the Land Use Plan was to create an optimal mix of compatible land uses and determine necessary infrastructure requirements for the 1,000 acre tract of land located along I-44 (“Development Area”). Specific goals established for the plan were: (1) to create a long-term, self-sustaining source of revenue for the Oklahoma City Airport Trust and (2) to promote economic development and create jobs for the Oklahoma City region. The Land Use Plan is intended to guide marketing and use of the Development Area property for years to come.

In support of these goals, the Land Use Plan provides a cohesive cost-effective approach to development opportunities for the Development Area. The Development Area was determined in coordination with the development of the Airport’s Master Plan and has been identified as property not included in the forecasted need for additional terminal and runway infrastructure at the Airport.

The Land Use Plan is based on a market driven analysis that determines the highest and best use of the Development Area as suitable for concurrent commercial use. The Plan defines criteria such as visibility, road access, appropriate adjacent land uses, terrain and large tracts to create a distinct development strategy for the future.

The Land Use Plan ensures that certain Airport land with airfield access will be reserved strictly for aviation activities and permits lands surplus to aviation requirements to be devoted to the development of non-aviation activities in a manner compatible with both the Airport and off-Airport land uses.

Implementation of the Land Use Plan will assist the Airport to become a magnet of growth in the Oklahoma City area by supplying private developers with the benefits of available land, worldwide transport, and shipping and travel opportunities from a central location.

#### **2. MARKET ASSESSMENT**

##### **A. Airport Market Region**

Both the population and economy are growing for the Oklahoma City region and central Oklahoma market areas. Compared to the nation, the region, with falling unemployment, one of the country’s strongest housing markets and solid growth in agriculture, energy and manufacturing is best positioned among the nation’s metropolitan areas to ride out the current economic crisis\*. The 3-year average median household income in 2007 was \$41,046 which is considered low for such a large city, according to the U.S. Census Bureau, but is made up for by the region’s low cost of living. The June 2009 unemployment rate was 6.0%, according to the Greater Oklahoma City Chamber of Commerce, 3.5% below the national rate.

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\*Forbes Magazine April 2008.

## **B. Commercial Development Market Analysis**

The Development Area is located on airport property and is reflected as a Zoning Overlay District for Airport Environs Zone I-2, as set forth in Division 4, of Article II of Chapter 12 of the Oklahoma City Municipal Code. Property located adjacent to the development area is predominantly zoned R-1, single-family residential. Based on the OKC Plan 2000 – 2020 Land Use Plan for the City of Oklahoma City, the Development Area is located in an area specified for Industrial Development. Across the Interstate, which is identified as an “Appearance Corridor”, is an area that is identified for Urban Development, promoting high-quality commercial, office, and mixed use businesses that are compatible with Aviation activity.

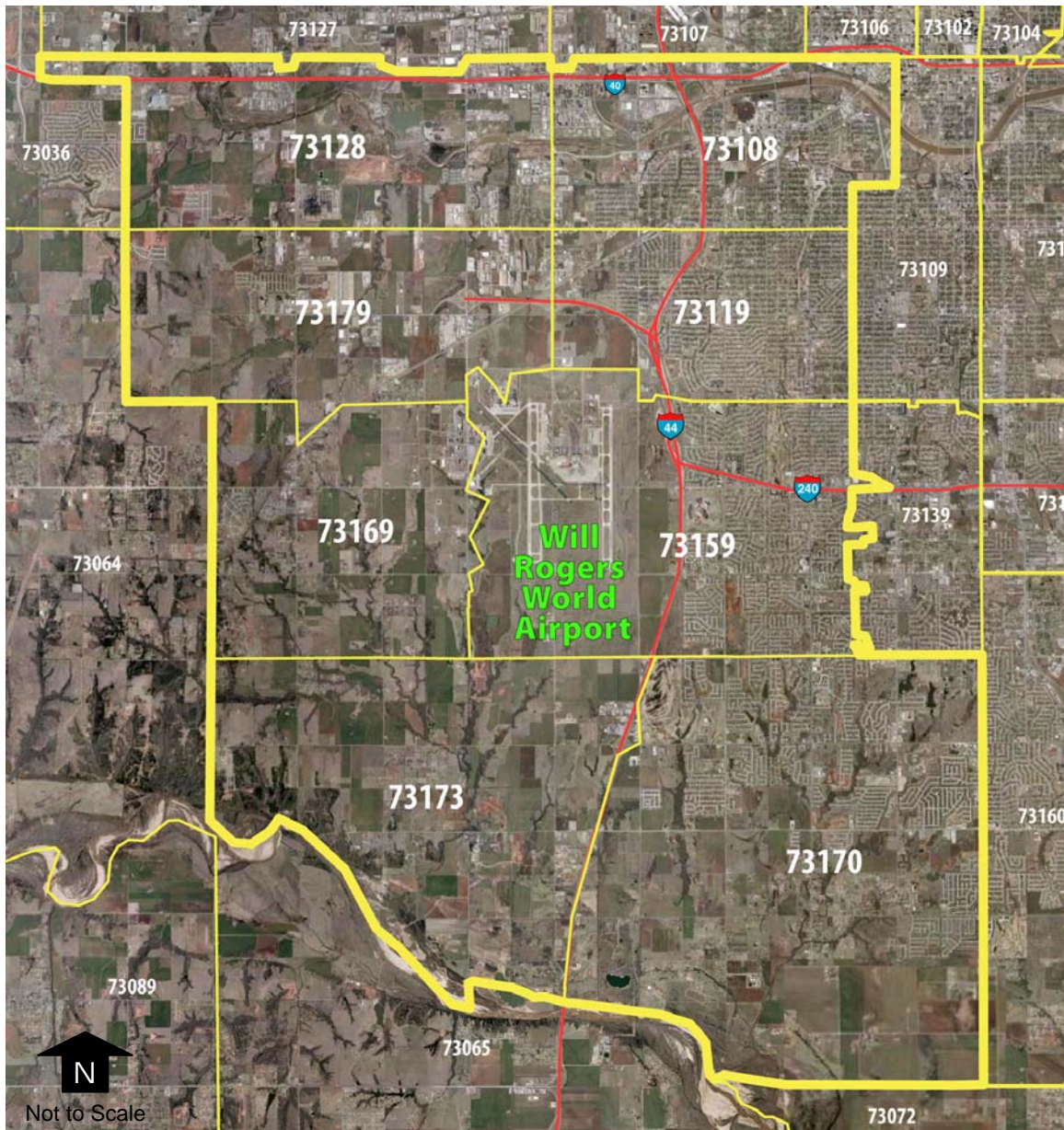
To assess the current real estate market conditions for the Development Area, an analysis was conducted to determine the supply and demand for commercial and industrial space on the Airport property available for development.

### ***STUDY ASSUMPTIONS***

The following assumptions were used in this study:

- Four commercial real estate product types were identified: (1) industrial - warehouse, (2) industrial - flex, (3) office and (4) retail. Industrial - flex space is defined as a structure with a clear height less than 18 feet, and industrial - warehouse space is space with a clear height above 18 feet. This analysis does not forecast demand for aviation-related space since this type of land use does not compete with the private submarket.
- The study timeframe was established as 40 years, based on an overall evaluation of the market and the amount of available property. To conduct this analysis, the overall timeframe was divided in 4 phases: Phase 1, from 2010 to 2019, Phase 2, from 2020 to 2029, Phase 3, from 2030 to 2039 and Phase 4, from 2040 to 2049.
- The total market is Oklahoma City. The submarket was established by identifying competitive market areas for the Airport. The airport submarket area was defined to include the following zip codes: 73108, 73119, 73159, 73169, 73179, 73170, 73173 and 73128, as illustrated on Figure 2.

Figure 2  
**AIRPORT SUBMARKET**



### **STUDY METHODOLOGY**

Employment and total personal income for Oklahoma City were selected as the economic indicators to project demand for space. Historical data for Oklahoma City for each real estate product type (industrial – warehouse, industrial – flex, office and retail) was compiled and the relationship to employment and income was examined. Employment serves as a good indicator for future space requirements for industrial-flex type space. Industrial-warehouse, office and retail space requirements are best forecasted using a combination of both socioeconomic factors. Future employment

and total personal income were forecasted and the demand for space was projected for the total market.

The submarket area performance relative to the total market was then established. The demand for space and the supportable new space was projected for industrial – warehouse, industrial – flex, office and retail on an annual basis, and then aggregated into Phases 1 to 4. The future supply of space for the Airport submarket was derived from the forecasted space demand for the total market, based on the following assumptions:

- The vacancy rates, defined as the percentage of all rental units not rented or unoccupied at a given time, were assumed to be equal to the average historical vacancy rates in the submarket (based on 7 years of historical data).
- The capture rates for the submarket were assumed to be equal to the average historical capture rates for the submarket (based on 7 years of historical data). The market capture rate is defined as the percentage of the new supply being built in the market that could be “captured” and built on vacant airport land in the development area.

The forecasts of supply of commercial space were converted to forecasts of absorption of land by commercial uses.

The level of new supply supportable on Airport property was determined after assessing the potential market capture rate for the land available for development. The development area is approximately 860 useable acres; this number assumes that space has been reserved for the relocated Portland Avenue and for a utilities corridor along it. Three scenarios were then created with varying capture rates:

- Low-range capture rate (19%): this scenario assumes that the share of development to be built is equal to the Airport’s historical share of development in the submarket.
- Mid-range capture rate (34%): this scenario uses a midpoint of the low and high range capture rates.
- High-range capture rate (49%): In this scenario, the Airport’s supply of available vacant land relative to the supply in the submarket was used to determine capture rates. It was assumed that the share of new supply to be built on airport property is equal to the Airport’s share of available land. Therefore, because 49% of the land available for development in the submarket is on airport property, the airport market capture rate would be 49%.



This analysis assumes the following:

- The Airport can overcome preference for “buy” deals over “lease” deals, because it will not sell parcels to developers
- The developers trust the Airport’s ability to “get the deal done,” overcoming legacy concerns that government can move slowly
- Lease terms and rental rates would be competitive and established to be “equal to Fee Simple Title” costs
- Infrastructure costs and permitting processes/costs would be similar to private property
- Ground leases would incorporate necessary lender provisions
- A marketing program would be established for the Development Area

The methodology is summarized on **Figure 3**.

## **RESULTS**

The results of the three scenarios, as presented in **Tables 2 and 3**, are as follows:

**Low-Range Capture Rate Scenario.** For the Airport, the highest demand is for industrial-warehouse space. In the low-range capture rate scenario, the Airport’s property industrial space projections range from approximately 19,500 square feet annually in Phase 1, to 13,000 square feet in Phase 2 and 12,400 square feet annually in Phases 3 and 4. Approximately 572,200 square feet of industrial-warehouse space would be projected for the study period.

The second highest market in demand would be retail space. Total retail space projection for the study period would be approximately 278,800 square feet. Supportable new supply on Airport property would hold stable at approximately 9,300 square foot annually during Phases 2, 3 and 4.

Supportable new construction of industrial-flex space would be limited to around 3,500 square feet annually in Phase 1, and to roughly 2,300 square feet annually in Phases 2 to 4. Total flex space would be projected to be 105,400 square feet over the 40-year planning period.

Office space has the least demand of the land uses examined. Approximately 62,700 square feet would be projected for the study period. Supply projections would decline from 2,100 square feet annually in Phase 1 to 1,100 square feet annually in Phase 4.

Figure 3  
STUDY METHODOLOGY

*Step 1: forecast demand for space in the total market, i.e. Oklahoma City*

| Input Data   |
|--|
| <ul style="list-style-type: none"><li>- <b>Real estate inventory data</b> incl. leased and total space for each land use type (industrial-warehouse, industrial-flex, office and retail)</li><li>- <b>Economic data</b> incl. historical and forecast data on employment and total personal income for Oklahoma City</li></ul> |
| Assumptions  |
| <ul style="list-style-type: none"><li>- <b>Study timeframe:</b> 40 years (2010-2049)</li><li>- <b>Total market:</b> Oklahoma City</li><li>- <b>Airport submarket:</b> area in the following zip codes: 73108, 73119, 73159, 73169, 73179, 73128, 73170 and 73173</li></ul>   |

Multiple regression analysis was used to establish a correlation between the historical economic factors and the historical leased space per product type for the total market. Regression equations were established; these equations were used to project future space demand based on projected values of employment and total personal income for Oklahoma City.

| Result  |
|---|
| Forecasted demand for real estate per land use type (industrial-warehouse, industrial-flex, office and retail) for the total market |

*Step 2: derive the future supply of space in the Airport submarket*

|                           | Industrial - Warehouse | Industrial - Flex | Office | Retail |
|---------------------------|------------------------|-------------------|--------|--------|
| Vacancy rate in submarket | 13%                    | 16%               | 13%    | 13%    |
| Submarket capture rate    | 45%                    | 35%               | 3%     | 14%    |

The future supply of space for the Airport submarket was derived from the forecasted space demand for the total market, based on the following assumptions:

- The vacancy rates were assumed to be equal to the average historical vacancy rates in the submarket (based on five years of historical data)
- The capture rates for the submarket were assumed to be equal to the average historical capture rates for the submarket (based on five years of historical data)

| Result   |
|--|
| Forecasted supply of space per product type (industrial-warehouse, industrial-flex, office and retail) for the Airport submarket |

*Step 3: convert forecasts of supply of space to forecasts of absorption of land by commercial use*

|  | Industrial-Warehouse   | Industrial-Flex        | Office                  | Retail                  |
|--|------------------------|------------------------|-------------------------|-------------------------|
| <b>Non-usable space (to account for hallways, mechanical, etc)</b> | Add 5% to usable space | Add 5% to usable space | Add 10% to usable space | Add 20% to usable space |
| <b>Building types</b>  |                        |                        |                         |                         |
| One-story buildings  | 100%                   | 100%                   | 50%                     | 100%                    |
| Three-story buildings  |                        |                        | 25%                     |                         |
| Five-story buildings   |                        |                        | 25%                     |                         |
| <b>Parking requirements</b>  |                        |                        |                         |                         |
| Number of car spaces per 1,000 sf GFA                              | 1                      | 2                      | 5                       | 5                       |
| Parking stall size (including drive and landscaping)               | 450 sf                 | 450 sf                 | 450 sf                  | 450 sf                  |

In step 2, the forecasted supply of space was calculated in net square footage. This forecast was then translated into forecast of absorption of land (in acres) by:

- Calculating the forecasted supply of space in gross square footage
- Calculating the footprint of the new supply being built
- Adding to this footprint the parking space requirements, the number of parking spaces being determined by following Oklahoma City Municipal Code guidelines

| Result  |
|---|
| Forecast of absorption of land per land use type (industrial-warehouse, industrial-flex, office and retail) for the airport submarket |

*Step 4: determine the Airport capture rate i.e. determine the share of new supply being built in the submarket that could be built on Airport property*

| Input Data   |
|--|
| Inventory of vacant land, for lease or for sale, available in the Airport submarket  |
| Assumptions  |
| Calculated 3 capture rates (low-range, mid-range and high-range capture rates) <ul style="list-style-type: none"><li>- Low-range: Assumes that the share of development to be built is equal to the Airport's historical share of development in the submarket</li><li>- Medium-range: Average of the low and high ranges.</li><li>- High-range: Assumes that the share of development to be built on airport property is equal to the Airport's share of available land. 49% of the land available for development in the submarket is on airport property so it was assumed that the Airport will attract 49% of the new supply being built.</li></ul> |

| Result   |
|--|
| Area (in acres) to be developed on Airport property per land use type (industrial-warehouse, industrial-flex, office and retail) |

**Mid-Range Capture Rate Scenario.** In the mid-range capture rate scenario (34% capture rate) the Airport's property industrial space projections would range from approximately 34,500 square feet annually in Phase 1, to 23,000 square feet in Phase 2 and 22,000 square feet annually in Phases 3 and 4, for an excess of 1 million square feet over the study period.

Total retail space projection for the study period would be approximately 493,900 square feet. Supportable new supply on Airport property would hold stable at 16,500 square foot annually during Phases 2 to 4.

Supportable new construction of industrial-flex space would be limited to around 6,100 square feet annually in Phase 1, and to roughly 4,100 square feet annually in Phases 2, 3 and 4. Total flex space would be projected to be 186,900 square feet over the 40-year planning period.

111,200 square feet of office space is projected for the study period. Supportable new construction anticipates about 3,600 square feet annually during the first two phases and 1,900 square feet annually during Phases 3 and 4.

**High-Range Capture Rate Scenario.** In the high-range capture rate scenario (49% capture rate), the Airport's property industrial space projections would range from approximately 49,500 square feet annually in Phase 1, to 33,000 square feet in Phase 2 and 31,500 square feet annually in Phases 3 and 4. Approximately 1.4 million square feet of industrial-warehouse space would be projected for the study period.

Total retail space projection for the study period would be approximately 709,000 square feet. Supportable new supply on Airport property would hold stable at 21,600 square foot annually during Phases 2 to 4.

Supportable new construction of industrial-flex space would be around 8,800 square feet annually in Phase 1, and to roughly 6,200 square feet annually in Phase 2 and 5,900 square feet annually in Phases 3 and 4. Total flex space would be projected to be 268,300 square feet over the 40-year planning period.

Approximately 159,600 square feet of office space would be projected for the study period. Supply projections decline from 5,200 square feet annually in Phases 1 and 2 to 2,800 square feet annually in Phases 3 and 4.

| Table 2  |                      |                       |                |                |
|--|----------------------|-----------------------|----------------|----------------|
| <b>FORECASTED SUPPLY OF SPACE ON AIRPORT PROPERTY (IN SQUARE FEET)</b> |                      |                       |                |                |
| Will Rogers World Airport Strategic Development Program                |                      |                       |                |                |
| LOW-RANGE CAPTURE RATE   |                      |                       |                |                |
| Time Period  | Industrial-warehouse | Industrial-flex space | Office         | Retail         |
| <b>Total Phase 1 (2010-2019)</b>                                       | 194,600              | 34,600                | 20,500         | 0              |
| Average per Year   | 19,500               | 3,500                 | 2,100          | 0              |
| <b>Total Phase 2 (2020-2029)</b>                                       | 129,800              | 24,200                | 20,400         | 92,400         |
| Average per Year   | 13,000               | 2,400                 | 2,000          | 9,200          |
| <b>Total Phase 3 (2030-2039)</b>                                       | 123,900              | 23,300                | 10,900         | 93,200         |
| Average per Year   | 12,400               | 2,300                 | 1,100          | 9,300          |
| <b>Total Phase 4 (2040-2049)</b>                                       | 123,900              | 23,300                | 10,900         | 93,200         |
| Average per Year   | 12,400               | 2,300                 | 1,100          | 9,300          |
| <b>Total Phases 1 to 4</b>   | <b>572,200</b>       | <b>105,400</b>        | <b>62,700</b>  | <b>278,800</b> |
| MID-RANGE CAPTURE RATE   |                      |                       |                |                |
| Time Period  | Industrial-warehouse | Industrial-flex space | Office         | Retail         |
| <b>Total Phase 1 (2010-2019)</b>                                       | 344,800              | 61,400                | 36,400         | 0              |
| Average per Year   | 34,500               | 6,100                 | 3,600          | 0              |
| <b>Total Phase 2 (2020-2029)</b>                                       | 230,000              | 42,900                | 36,200         | 163,700        |
| Average per Year   | 23,000               | 4,300                 | 3,600          | 16,400         |
| <b>Total Phase 3 (2030-2039)</b>                                       | 219,600              | 41,300                | 19,300         | 165,100        |
| Average per Year   | 22,000               | 4,100                 | 1,900          | 16,500         |
| <b>Total Phase 4 (2040-2049)</b>                                       | 219,600              | 41,300                | 19,300         | 165,100        |
| Average per Year   | 22,000               | 4,100                 | 1,900          | 16,500         |
| <b>Total Phases 1 to 4</b>   | <b>1,014,000</b>     | <b>186,900</b>        | <b>111,200</b> | <b>493,900</b> |
| HIGH-RANGE CAPTURE RATE  |                      |                       |                |                |
| Time Period  | Industrial-warehouse | Industrial-flex space | Office         | Retail         |
| <b>Total Phase 1 (2010-2019)</b>                                       | 495,000              | 88,100                | 52,200         | 0              |
| Average per Year   | 49,500               | 8,800                 | 5,200          | 0              |
| <b>Total Phase 2 (2020-2029)</b>                                       | 330,200              | 61,600                | 52,000         | 235,000        |
| Average per Year   | 33,000               | 6,200                 | 5,200          | 23,500         |
| <b>Total Phase 3 (2030-2039)</b>                                       | 315,300              | 59,300                | 27,700         | 237,000        |
| Average per Year   | 31,500               | 5,900                 | 2,800          | 23,700         |
| <b>Total Phase 4 (2040-2049)</b>                                       | 315,300              | 59,300                | 27,700         | 237,000        |
| Average per Year   | 31,500               | 5,900                 | 2,800          | 23,700         |
| <b>Total Phases 1 to 4</b>   | <b>1,455,800</b>     | <b>268,300</b>        | <b>159,600</b> | <b>709,000</b> |
| Source: Jacobs Consultancy.  |                      |                       |                |                |

Table 3

**FORECAST OF LAND ABSORPTION ON AIRPORT PROPERTY (IN ACRES)**

Will Rogers World Airport Strategic Development Program

| LOW-RANGE CAPTURE RATE           |                      |                 |             |             |              |
|----------------------------------|----------------------|-----------------|-------------|-------------|--------------|
| Time Period                      | Industrial-warehouse | Industrial-flex | Office      | Retail      | Total        |
| <b>Total Phase 1 (2010-2019)</b> | 7.2                  | 1.6             | 1.4         | 0.0         | 10.2         |
| Average per Year                 | 0.7                  | 0.2             | 0.1         | 0.0         | 1.1          |
| <b>Total Phase 2 (2020-2029)</b> | 4.8                  | 1.1             | 1.4         | 7.0         | 14.3         |
| Average per Year                 | 0.5                  | 0.1             | 0.1         | 0.7         | 1.6          |
| <b>Total Phase 3 (2030-2039)</b> | 4.6                  | 1.1             | 0.7         | 7.1         | 13.5         |
| Average per Year                 | 0.5                  | 0.1             | 0.1         | 0.7         | 1.5          |
| <b>Total Phase 4 (2040-2049)</b> | 4.6                  | 1.1             | 0.7         | 7.1         | 13.5         |
| Average per Year                 | 0.5                  | 0.1             | 0.1         | 0.7         | 1.5          |
| <b>Total Phases 1 to 4</b>       | <b>21.2</b>          | <b>5.0</b>      | <b>4.2</b>  | <b>21.2</b> | <b>51.5</b>  |
| MID-RANGE CAPTURE RATE           |                      |                 |             |             |              |
| Time Period                      | Industrial-warehouse | Industrial-flex | Office      | Retail      | Total        |
| <b>Total Phase 1 (2010-2019)</b> | 12.7                 | 2.9             | 2.4         | 0.0         | 18.1         |
| Average per Year                 | 1.3                  | 0.3             | 0.2         | 0.0         | 2.0          |
| <b>Total Phase 2 (2020-2029)</b> | 8.5                  | 2.0             | 2.4         | 12.4        | 25.4         |
| Average per Year                 | 0.8                  | 0.2             | 0.2         | 1.2         | 2.8          |
| <b>Total Phase 3 (2030-2039)</b> | 8.1                  | 2.0             | 1.3         | 12.5        | 23.9         |
| Average per Year                 | 0.8                  | 0.2             | 0.1         | 1.3         | 2.7          |
| <b>Total Phase 4 (2040-2049)</b> | 8.1                  | 2.0             | 1.3         | 12.5        | 23.9         |
| Average per Year                 | 0.8                  | 0.2             | 0.1         | 1.3         | 2.7          |
| <b>Total Phases 1 to 4</b>       | <b>37.5</b>          | <b>8.8</b>      | <b>7.4</b>  | <b>37.5</b> | <b>91.2</b>  |
| HIGH-RANGE CAPTURE RATE          |                      |                 |             |             |              |
| Time Period                      | Industrial-warehouse | Industrial-flex | Office      | Retail      | Total        |
| <b>Total Phase 1 (2010-2019)</b> | 18.3                 | 4.2             | 3.5         | 0.0         | 25.9         |
| Average per Year                 | 1.8                  | 0.4             | 0.3         | 0.0         | 2.9          |
| <b>Total Phase 2 (2020-2029)</b> | 12.2                 | 2.9             | 3.4         | 17.9        | 36.4         |
| Average per Year                 | 1.2                  | 0.3             | 0.3         | 1.8         | 4.0          |
| <b>Total Phase 3 (2030-2039)</b> | 11.7                 | 2.8             | 1.8         | 18.0        | 34.3         |
| Average per Year                 | 1.2                  | 0.3             | 0.2         | 1.8         | 3.8          |
| <b>Total Phase 4 (2040-2049)</b> | 11.7                 | 2.8             | 1.8         | 18.0        | 34.3         |
| Average per Year                 | 1.2                  | 0.3             | 0.2         | 1.8         | 3.8          |
| <b>Total Phases 1 to 4</b>       | <b>53.8</b>          | <b>12.7</b>     | <b>10.6</b> | <b>53.9</b> | <b>130.9</b> |

Source: Jacobs Consultancy.



### C. SWOT Analysis

This section summarizes the strengths, weaknesses, opportunities, and threats (SWOT) for the Airport Development Area. The primary objective of the SWOT analysis is to isolate and properly categorize (1) strengths and weaknesses of the Development Area and/or the Airport organization (from an “internal” perspective) and (2) opportunities and threats that exist to the Development Area and/or the Airport organization (from an “external” perspective). This analysis provides a basis to later match resources and capabilities to the competitive environment in which the Development Area is to be developed, operated and managed.

Strengths are items that are accomplished particularly well or they are unique assets that can be used better to accomplish the Airport’s vision for the Development Area. Strengths should be preserved and developed to the greatest extent possible.

Weaknesses are those items that are not accomplished particularly well, prevent desired performance, or are lacking, in order to accomplish the vision of the Airport for the Development Area. Weaknesses should be addressed immediately and remedied to the greatest extent possible.

Opportunities are external factors (usually beyond the control of Airport management) that could potentially be capitalized upon to improve Airport performance with respect to the Development Area. Opportunities can be pinpointed as a result of careful analysis of trends or changes within the industry, the marketplace, or the community. Opportunities should be acted upon whenever they appear or become apparent.

Threats are external factors (usually beyond the control of Airport management) that could negatively affect the accomplishment of the Airport’s vision for the Development Area. Threats should be managed or eliminated, to the greatest extent possible.

#### **STRENGTHS**

The strengths of the Airport include:

- ***Regional Economic Growth and Road Proximity.*** The Airport is located in an area that is expected to experience growth in population, employment and business activity. The Development Area is located quite close to major road networks (Interstate highways I-40, I-44, and I-35).
- ***Available Airfield Capacity and Infrastructure.*** As indicated in the 2009 Airport Master Plan Update, there is sufficient airfield capacity to accommodate significant increases in activity at the Airport, as well as development of multiple new lines of business, such as air cargo and an industrial or business park. Additionally, the Airport’s infrastructure is considered to be well managed.

- ***Available Land.*** The Airport's Development Area has about 1,000 acres of land available for both aviation and non-aviation development. These 1,000 acres represent the total acreage of the site. As individual parcels are laid out, their acreages will add up to less than 1,000 acres since space has to be set aside for infrastructures such as utilities, roadways, oil wells, and associated right-of-ways. Additionally, off-Airport land is available immediately adjacent to the Airport, which, provided the land is developed compatibly with Airport uses, is considered strength to the Airport.
- ***Foreign Trade Zone and Other Incentives.*** A Foreign Trade Zone ("FTZ") is a site in or near a U.S. Customs port of entry where foreign and domestic merchandise is generally considered to be in international trade. FTZ#106 serves a 41-county region and is conveniently located adjacent to the Airport in Oklahoma City. Approximately 1,300 acres of Airport property is available in FTZ#106 benefits. The property included in the Development Area can be granted FTZ benefits with a simple process of boundary modification to include the desired property area.

There are other incentives such as tax abatements and tax increment financing that may be offered by regional economic development agencies to encourage future development at or near the Airport.

- ***Lack of Off-Airport Development Constraints.*** At present, there is limited residential or commercial development located in the immediate vicinity of the Development Area. As such, the Development Area is potentially unconstrained as it relates to future development—whether such development is associated with increased aviation or non-aviation activity.

Additionally, the Airport is located in a clean air attainment area where the concentration of air pollutants does not exceed federal air quality standards.

- ***Experienced Airport Management.*** Airport management has broad political support from active regional economic development agencies. In addition, Airport management has assembled technical and financial experts, Airport representatives and community leaders in special committees and working groups under the direction of a Steering Committee for the preparation of the Development Plan.
- ***Financial Assets.*** The Airport is in receipt of Airport Improvement Program (AIP) funding and currently is well-managed fiscally.
- ***On-Airport Businesses.*** Sixty seven businesses and government offices are currently located on Airport property and provide a good platform for future growth.

## **WEAKNESSES**

The weaknesses of the Airport include:

- ***Regional Airport Competition.*** With respect to the expansion of cargo operations in the Development Area, the Dallas/Fort Worth International Airport and Alliance Airport (in Ft. Worth, Texas) are established centers of commerce related to cargo operations. Notwithstanding the generally positive regional economic and business growth outlook for the City, its distance from the Dallas/Fort Worth area has not been considered sufficiently high by shippers or freight forwarders to warrant significant development of air cargo facilities separate from those at Alliance or Dallas/Fort Worth International airports.

In addition, the cargo distribution and warehouse activity that is a by-product of regional economic expansion is being actively marketed by many of the other regional airports in Oklahoma and in north Texas.

- ***Nature of Economic Growth.*** While regional economic growth originating from the City is expected to continue, there is the prospect that a significant portion of this growth (e.g., retail, commercial) would not be located in the Airport Region, but would locate in other areas of the City to support population growth. To the extent this trend occurs, it may be a limitation on non-aviation development at the Airport. However, it should also be noted that light industrial development in the area has increased significantly.
- ***Maintenance of Infrastructure.*** The City currently maintains only a portion of the Airport infrastructure, and the remaining infrastructure is maintained by the Airport. While this approach may be more cost effective, the maintenance requirements at the Airport may not be addressed as quickly as they could be.
- ***Existing Easements and Rights of Way.*** The Airport has granted several easements constraining the utilization of the Development Area. Existing easement holders include:
  - Marathon Oil, which operates several oil wells and associated pipelines on the Development Area
  - Utilities providers (Oklahoma City Utilities Department, OG+E, and Oklahoma Natural Gas), which operate utility infrastructure along the current alignment of Portland Avenue
  - County roads – such as old Portland Avenue between SW 74<sup>th</sup> Street and 89<sup>th</sup> Street - are not vacated, therefore requiring to maintain right-of-ways associated with these roads

- ***Lack of Clearly Defined Stakeholder Relationships.*** The Airport is sponsored by the Trust, who, in turn, works with the City government and the local Chamber of Commerce. As such, while the political will may exist to develop the Airport, coordination of future development initiatives poses a significantly greater challenge when stakeholder relationships are not defined.
- ***Economic Benefit.*** There is no return on investment with respect to Airport funded infrastructure. The cost for on-Airport infrastructure to support development of leased areas is paid by the Airport, and upon completion, the infrastructure is transferred to the City at no cost. The Airport is currently unable to include a repayment of its infrastructure cost as a component of the lease payments, and does not receive the benefit of the tap in fees or other user fees associated with the use of the Airport constructed infrastructure. In addition, certain tax revenue benefits go to school districts, which do not provide funding for the Airport. There is no agreed-upon program for funding distribution for any potential Airport stakeholders.

## **OPPORTUNITIES**

The opportunities for developing new revenue-generating activities at the Airport include:

- Economic development (new jobs) associated with the continued growth in population and expansion of business activities within the City.
- ***Commercial/business/corporate Aviation Development.*** The City has traditionally been a strong aviation market. As such, it is expected that opportunities to develop additional or supplemental aviation businesses at the Airport including, but not limited to, aircraft manufacturing and assembly, corporate aviation and freight forwarding, will arise.
- ***Non-aviation Business Development.*** The expected regional economic growth together with Airport management programs and available land provide a significant opportunity to develop non-aviation businesses.

## **THREATS**

The threats that could prevent the development of new revenue-generating activities at the Airport include:

- ***Potential Commercial Business and Residential Development in the Surrounding Area.*** There is the potential for significant residential and the corresponding commercial development adjacent to the development area in the Airport Region, that would compete for non-aviation commercial real estate development.

- ***Significant Vacant Land Areas.*** Other large parcels of vacant land exist in the Airport Region that competes with the Airport for non-aviation commercial real estate development. Each competing tract of land is unique and each has its own strengths and weaknesses, however many of these tracts are or will be available for sale (as opposed to a lease structure for Airport property) and many developers have a preference to purchase a fee simple title for development property. This weakness could be minimized by competitive measures such as creating a leasing rental program that creates lease rates that translate into “same as fee simple” cost to developers, and establishing incentives or minimizing charges, such that the Airport breaks even on developments, particularly for early “first-mover” developments that increase activity levels at the Airport and could possibly lead to future development.

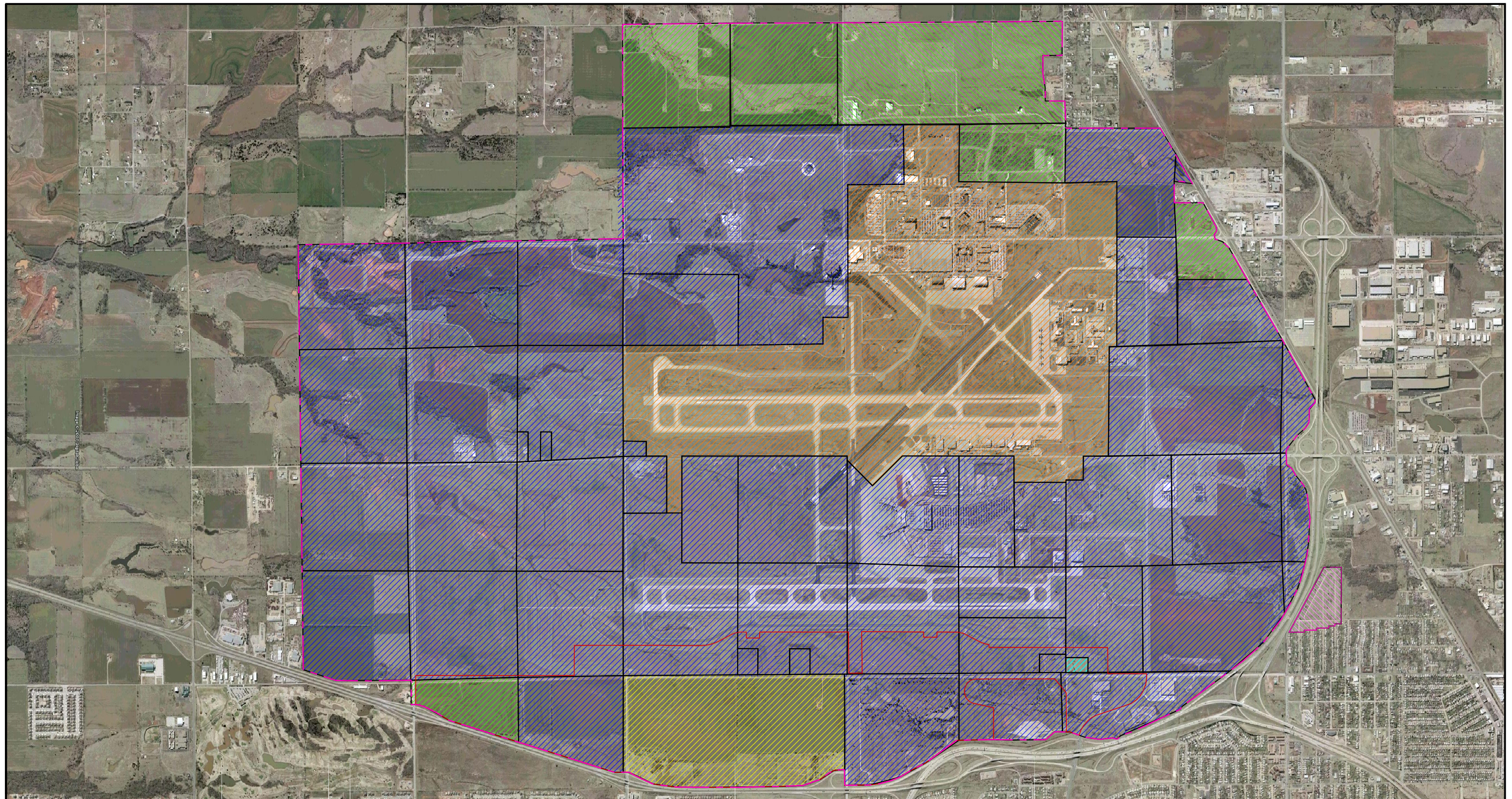
### **3. DEVELOPMENT AREA CHARACTERISTICS**

As previously discussed, the Development Area was identified by the Master Plan as property not included in the forecasted need for additional terminal and runway infrastructure at the Airport. The site targeted for development consists of approximately 1,000 total acres of undeveloped land on the east side of the Airport, between the airfield and Interstate 44. It is directly south of several smaller on-Airport parcels that have been developed as office and warehouse space.

#### **A. Property**

**Figure 4** is the Airport property map, illustrating the location of the Development Area and how the parcels composing the site were acquired. It was established early in the process that a land parcel along I-44 was identified by the Federal Aviation Administration as “noise land.” The Federal Aviation Administration (FAA) has approved the reclassification of this parcel to eligible airport development land needed in connection with the operation and maintenance of the Airport, and the interim use of any aviation property in the Development Area not needed for Direct Aviation uses, for use as Indirect Aviation, Concurrent Commercial development. There are currently no known remaining property constraints to airport development in the Development Area.





# LEGEND

- Existing airport property line
- Development area
- Land bought with airport trust fund
- Land bought with FAA grants
- Land owned by OKC water
- US Government surplus property
- FAA noise land
- FAA noise land reclassified as airport development land



0 1125 2250 4500

Scale: 1" = 2250'

**Figure 4**  
**PROPERTY MAP**

Strategic Development Plan  
Oklahoma City Will Rogers World Airport  
July 2009

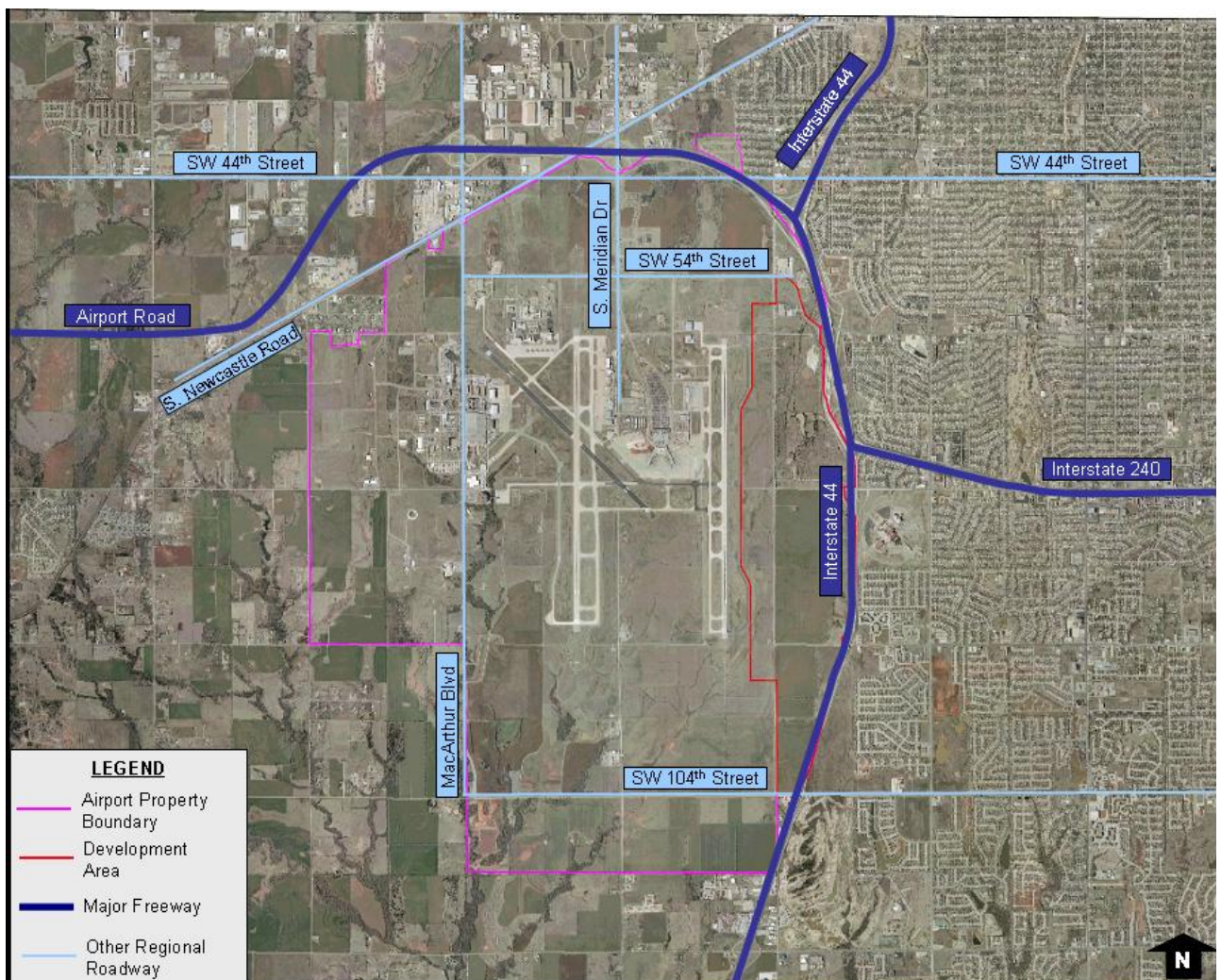
**JACOBS**  
**CONSULTANCY**  
*Airport Management Consulting*



## B. Roadway Access

As illustrated on **Figure 5** below, the property is located west of the Interstate 44, which provides access to downtown Oklahoma City. The site is crossed from north to south by South Portland Avenue. There are plans to relocate Portland Avenue east of its current location. Preliminary drawings of this improvement show that Portland Avenue would follow the eastern border of the site to be developed. The northern boundary of the site is marked by SW 54<sup>th</sup> Street and the southern boundary by SW 104<sup>th</sup> Street.

Figure 5  
**ROADWAY ACCESS**



## C. Airfield Considerations

The Airport recently initiated a project to extend Taxiways H1, G and H2. The length of the Taxiway G extension remains to be determined: it could either be extended to or beyond the existing location of South Portland Avenue. This project will provide

airfield access to the land located along the western boundary of the property to be developed. The taxi distances to Runway 17L-35R would be very short, making the location particularly attractive for aviation land uses.

Other airfield considerations will come into play when planning the site. Building heights on the site will be limited by Obstacle Limitation Surfaces as defined in Federal Regulation Title 14 Part 77. Preliminary Part 77 surfaces drawings show that on the portion of the site located east of the existing South Portland Avenue, construction will be limited in height by the horizontal surface, i.e. buildings will have heights below 150 feet above airport elevation. On the western portion of the site, heights will be limited by the transitional surfaces for Runway 17L-35R. More detailed height restrictions are delineated in Attachment H, Development Standards Manual. It should be noted that these height restrictions are not seen as a significant impediment to development.

The taxiway extension project and the height limitations are illustrated on **Figure 6**. This figure also shows the building restriction line (BRL). This line identifies the suitable location for buildings on the Airport; no development shall be built west of the BRL.

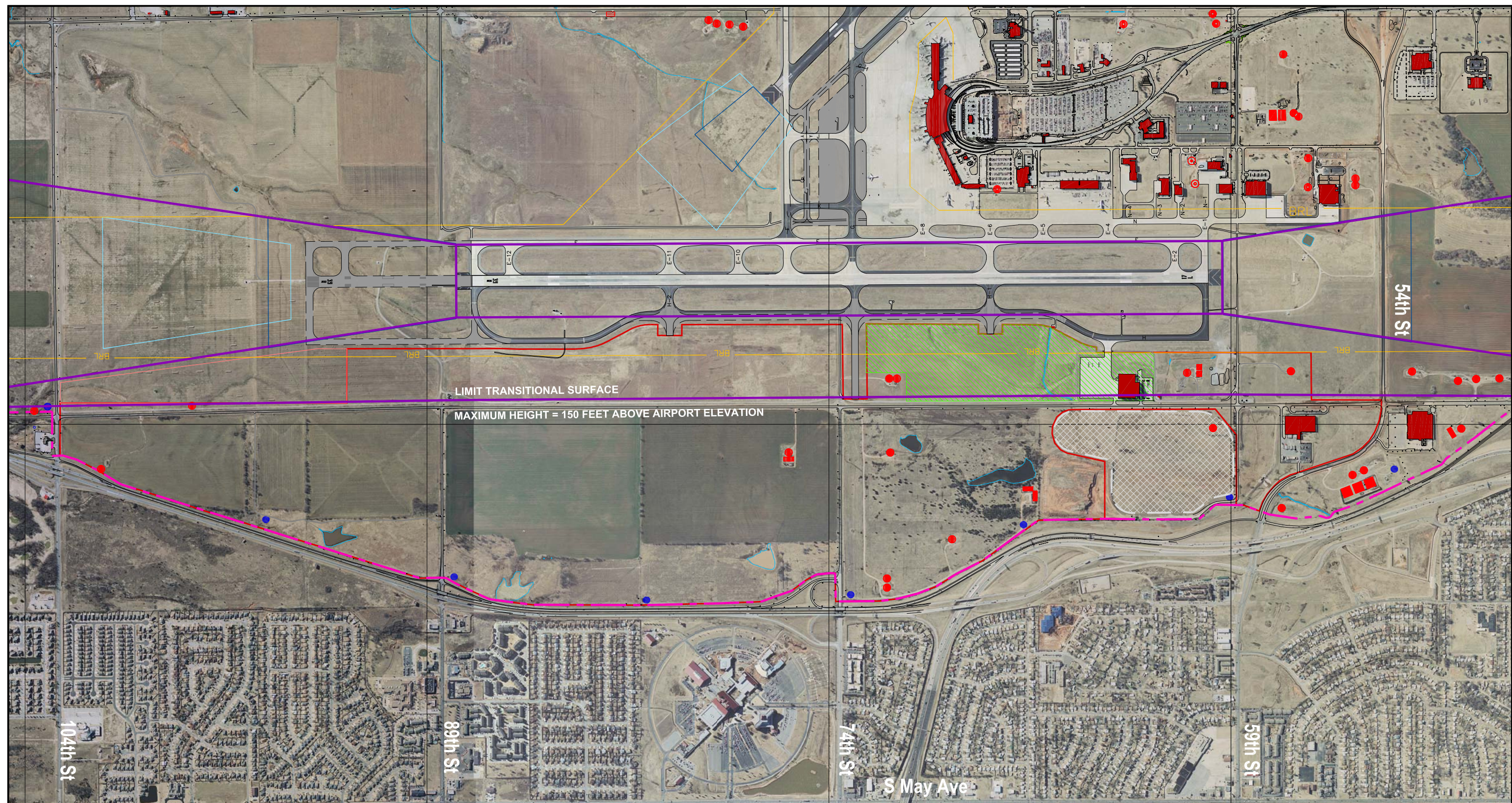
#### **D. Utilities**

Significant utility infrastructure is located within the Development Area, with a main corridor of utilities located along South Portland Avenue, specifically:

- ***Water lines (Operated by Oklahoma City Utilities Department).*** There is a 36" water line located along Portland Avenue and a 16" pipeline, fire booster and sewer line located near the ARINC facility. Future expansion plans include a new pump station to be built by the City of Oklahoma City in the vicinity of SW 104th Street and Portland Avenue.
- ***Electric lines (Operated by Oklahoma Gas & Electric).*** The main electric feed into the Airport is located along 59th Street, underground west of Portland Avenue and aboveground east of Portland Avenue. A backup line is located along Portland Avenue. Future substations are planned outside the Airport boundary at 59th Street and I-44, 124th Street and Pennsylvania Ave, 81st Street and Pennsylvania Avenue.
- ***Gas lines (operated by Oklahoma Natural Gas).*** ONG operates a 24" high-pressure transmission line along Portland Avenue.

The site also features several water wells operated by the City of Yukon, located along its eastern border. The City of Yukon is currently surveying the well locations.





### LEGEND

- 
- Legend:
- Existing airport property line
  - Development area
  - Land developable after airfield expansion
  - Future airfield expansion
  - Existing Runway Protection Zone
  - Future Runway Protection Zone
  - Building restriction line
  - FAR Part 77 surface

**Source: Airport Layout Plan provided by Barnard Dunkelberg**



NORTH

0      625      1250      2500

**Scale: 1" = 1250'**

**Figure 6**  
**AIRFIELD CONSIDERATIONS**

Strategic Development Plan  
Oklahoma City Will Rogers World Airport  
July 2009

**JACOBS**  
**CONSULTANCY**  
*Airport Management Consulting*



### **E. Oil Facilities**

As shown on **Figure 7**, the Development Area features numerous oil wells, all but one operated by Marathon Oil. Marathon's installations are located north of 74<sup>th</sup> Street. It was assumed that for all petroleum pipelines, there is a 5-foot easement on either side of the line. Marathon Oil management confirmed that there are no plans for expansion on the study site.

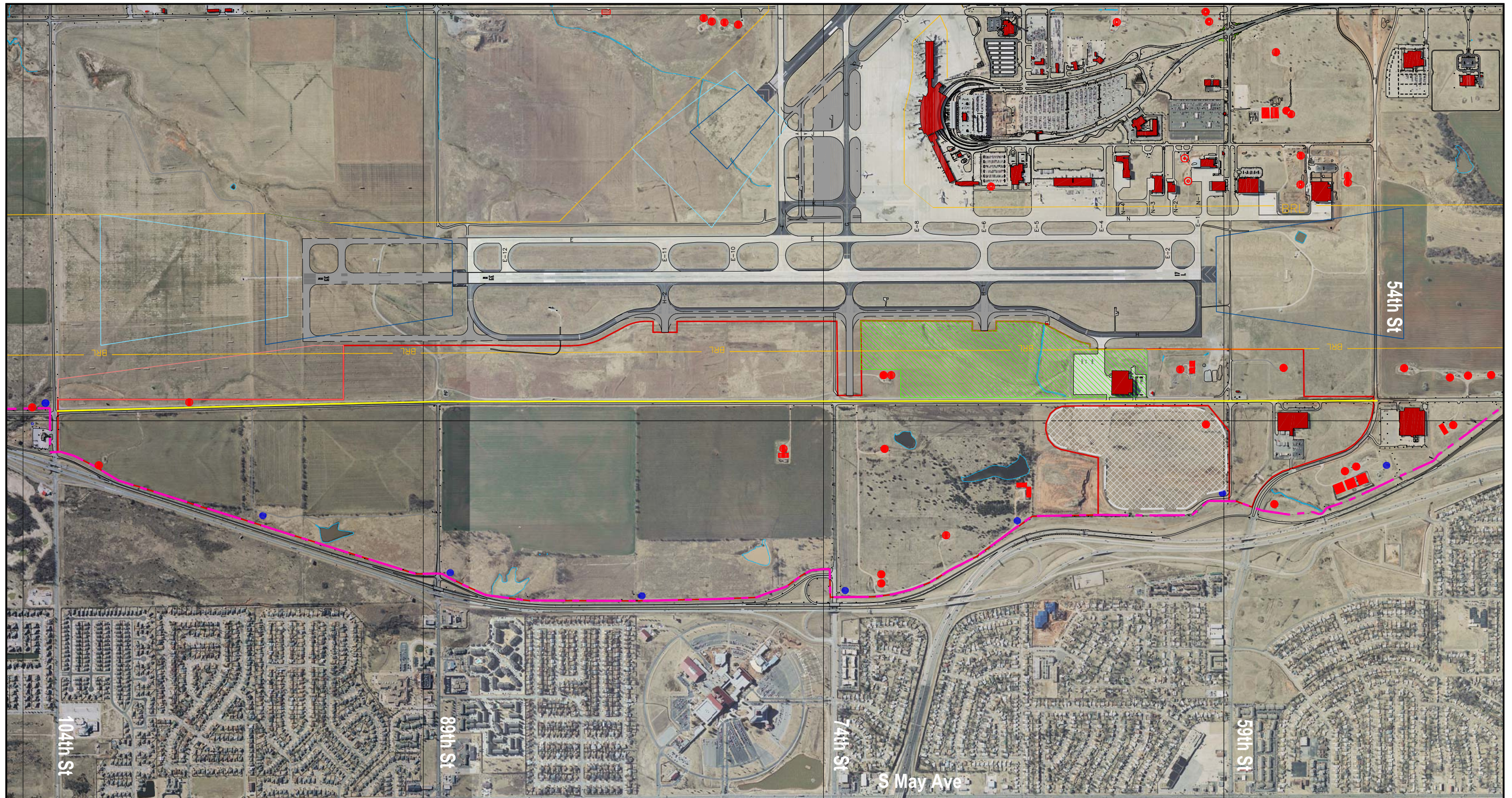
Additional oil facilities include an oil well located south of 74th Street and owned by an independent operator, Sparks Wildcatter. There are no expansion plans for this site, but access to the site must be maintained and it is not available for other development.

### **F. Environmental Considerations**

Environmental characteristics of the site were also considered to determine if any environmental aspect could be an impediment to the development of the site. According to information provided on the Airport Layout Plan and provided by the Master Plan consultant, Barnard Dunkelberg & Company, there are several wetlands located on the property to be developed. They are mostly located on the northern half of the property, and a few others are located on the southern half, along I-44. These wetlands located are man-made and are not listed on the Corps of Engineers inventory, meaning they should not be considered as constraints.

Figure 7 summarizes all known development constraints that affect the development of the Development Area.





# LEGEND

- |  |   |  |  |
|--|---|--|--|
|  | Existing airport property line            |  | Existing utilities corridor (See Figure 16 for additional details) |
|  | Development area                          |  | Stormwater detention pond  |
|  | Land developable after airfield expansion |  | Water well   |
|  | Future airfield expansion                 |  | Oil well   |
|  | Existing Runway Protection Zone           |  | Leased land  |
|  | Future Runway Protection Zone             |  |  |
|  | Building restriction line                 |  |  |

Source: Airport Layout Plan provided by Barnard Dunkelberg



0 625 1250 2500

Scale: 1" = 1250'

**Figure 7**  
**DEVELOPMENT CONSTRAINTS**

Strategic Development Plan  
Oklahoma City Will Rogers World Airport  
July 2009

**JACOBS**  
**CONSULTANCY**  
Airport Management Consulting



#### 4. DEVELOPMENT SCENARIOS AND FACILITY REQUIREMENTS

The scenario development process started with the identification of land uses that are appropriate for the development area. Development scenarios for the site were based on potential opportunities for various activities to be located on the Airport. Three development scenarios were formulated, including an estimate of the overall size of each land use, based on importance and likelihood. Using these scenarios, facility requirements were developed representing the full build-out of facilities.

##### A. Potential Development Classifications

Land development was consolidated in four broad classifications as described in Section 2 (B) of the Business Plan: (1) Direct Aviation, (2) Direct Aviation Support, (3) Indirect Aviation, and (4) Non-aviation in order to forecast demand and calculate space needs.

##### ***DIRECT AVIATION***

**Corporate Aviation.** Companies that have headquarters or major operations in Oklahoma City may benefit from basing aircraft at the Airport. This type of aviation activity is growing because companies can use a private aircraft to transport several persons from one office or job site to another in one day, saving the expense of overnight accommodations and the time, expense, and logistics of regular commercial flights. In addition, the perceived security inconvenience at passenger airline terminals and cutbacks of air service to smaller cities and towns has contributed to this growing trend. In addition to actually owning the aircraft themselves, corporations and individuals now can purchase rights to a fleet of aircraft. Often called fractional ownership, these aircraft are “shared” by a number of companies or individuals and operated by a central umbrella organization. Under the fractional ownership concept, companies do not own the aircraft, but share a fleet of aircraft and pilots with other companies. In this manner, much of the cost of owning aircraft and training crews is saved by transferring the cost and risk to a consolidated firm such as NetJets. A fractional firm such as NetJets may own hundreds of aircraft and have pilots and crews located across the country. Thus the Airport may seek either companies to base their own aircraft at the Airport or a fractional ownership firm could develop a base at the Airport. It should be noted that Wiley Post Airport, also operated by the Airport Trust, serves a significant segment of corporate aviation activity. The type of activity that would potentially base at OKC would be the higher-end aircraft requiring an Instrument Landing System, 24-hour air traffic control, and longer runways.

**Air Cargo.** For this analysis, air cargo operators include the integrated carriers that offer air and ground transportation (FedEx, UPS, DHL/Airborne) and the traditional air cargo carriers including regularly scheduled passenger airlines who handle belly cargo, and all-cargo airlines. Air cargo includes both domestic and international shipments – typically the two types of cargo are consolidated on flights to and from gateway airports. Air cargo includes shipments associated with potential land uses such as an on-airport logistics center that stores, handles or ships products

on a just-in-time basis. Specialty air cargo can include live animal shipments, hazardous materials, refrigerated goods and other shipments requiring special facilities. The opportunities and challenges pertaining to cargo activity at Will Rogers World Airport were examined in coordination with the Airport Master Plan analysis.

### ***DIRECT AVIATION SUPPORT***

**Freight Forwarding (Warehouse).** Warehouse-related developments include both air cargo related and ground-shipped freight. Because both ground and air shipments are often mixed on trucks and at the warehouse, an airport location can be strategic. In addition, cargo shippers are becoming integrated with “logistics systems” adding to the traditional warehousing function. An airport, since it provides last minute shipment capability, is an ideal site for this type of activity. In general, the result is consolidation of warehouse space, reducing the need for large warehouses, because of smaller distribution centers at key points in the production/distribution cycle. It should be noted that the integrated air cargo carriers such as FedEx and UPS are transitioning more into ground shipments. In addition, the integrated carriers are now providing full-service logistics capabilities, such as collection, repair, and return of electronic components. Therefore, a distribution center for UPS, FedEx, or other integrated carrier on the site might include both air and ground shipments, as well as logistics functions.

**Aviation-Industrial Activities.** Aviation-industrial activities include aircraft manufacturing, maintenance and ancillary activities such as parts depots. Aircraft modification, painting, engine repair, or other aircraft upkeep services and facilities are included in this aircraft maintenance category. In general, maintenance, repair and overhaul demand has been reduced significantly as older aircraft were retired after September 11, 2001. However, aircraft require constant upkeep and various special aircraft modifications continually occur. The increased use of business aircraft also has raised the demand for corporate jet maintenance facilities. These corporate maintenance hangars are often co-located with major service points. Therefore, a combination maintenance hangar/crew base is possible if a major corporation or fractional jet firm locates on the Airport.

### ***INDIRECT AVIATION***

**Retail-Indirect Aviation.** This includes light retail that would provide goods and services for the aviation-related users, including the passengers, employees, agents and contractors, guests, and the tenants of the Airport.

### ***NON-AVIATION***

Non-aviation development includes the four commercial real estate product types that were identified in the commercial development market analysis: industrial – warehouse, industrial – flex, office and retail.

## **STRATEGIC LAND RESERVE**

A strategic land reserve, composed of large parcels for potential mega-developments, should be provided. This meets the project goals and objectives in maintaining the ultimate capability to accommodate a very large land use tenant.

### **B. Development Scenarios**

Three development scenarios were formulated based on varying levels of aviation and commercial development:

- Scenario 1: Heavy aviation use – Light non-aviation use
- Scenario 2: Medium aviation use – Medium non-aviation use
- Scenario 3: Light aviation use – Heavy non-aviation use

As detailed in the commercial development market analysis, to assess the real estate market conditions, a study was conducted to determine the supply and demand for commercial and industrial space on the Airport property available for development. Three scenarios were delineated for varying capture rates, the market capture rate being the percentage of the new supply being built in the market that could be “captured” and built on vacant airport land in the development area. These three scenarios were used to define the level of commercial development in each development scenario.

To facilitate the facility requirements effort, the percentage of the site that each use would occupy as well as the acreage of each use was estimated, the developable area being approximately 680 acres. This allowed a reality check on whether the amount of property allocated would be appropriate.

#### ***Scenario 1: Heavy Aviation Use***

The heavy aviation use scenario, described in **Table 4**, provides larger development sizes and maximizes the Airport’s aviation assets. Approximately 620 acres are reserved for aviation-related uses. The concept allows for aviation-support and indirect aviation activities, such as aircraft manufacturing and parts distribution. Aircraft manufacturing, air cargo and freight forwarding are the largest land uses in this scenario.

The non-aviation uses are limited to 51 acres and there is no land reserve. The split between industrial, office and retail uses was derived from the low-range capture rate forecast of the market analysis.

Table 4  
**SCENARIO 1 SPACE ALLOCATIONS**  
 Will Rogers World Airport Strategic Development Program

| Type of Use   | Percent Site<br>Occupancy | Acres      |
|---|---------------------------|------------|
| <b>Direct Aviation</b>                                      |                           |            |
| Corporate Aviation  | 9%                        | 61         |
| Air Cargo   | <u>15%</u>                | <u>101</u> |
| Subtotal  | 24%                       | 162        |
| <b>Direct Aviation Support with Airside Access</b>          |                           |            |
| Aircraft Maintenance Facility                               | 15%                       | 101        |
| Aircraft Manufacturing                                      | <u>29%</u>                | <u>198</u> |
| Subtotal  | 44%                       | 299        |
| <b>Direct Aviation Support without Airside Access</b>       |                           |            |
| Freight Forwarding (warehouse)                              | 15%                       | 101        |
| Aircraft Parts Depot  | <u>5%</u>                 | <u>34</u>  |
| Subtotal  | 20%                       | 135        |
| <b>Indirect Aviation without Airside Access</b>             |                           |            |
| Retail - Indirect Aviation (supporting developed land uses) | <u>4%</u>                 | <u>27</u>  |
| Subtotal  | 4%                        | 27         |
| <b>Non-aviation</b>   |                           |            |
| Industrial - Warehouse                                      | 3%                        | 21         |
| Industrial - Flex   | 1%                        | 5          |
| Office  | 1%                        | 4          |
| Retail - Other  | <u>3%</u>                 | <u>21</u>  |
| Subtotal  | 8%                        | 51         |
| <b>Strategic Land Reserve</b>                               | <b>0%</b>                 | <b>0</b>   |
| <b>TOTAL</b>  | <b>100%</b>               | <b>674</b> |

Note: Numbers may not add up due to rounding.

Source: Jacobs Consultancy.



### Scenario 2: Medium Aviation Use

This scenario, shown in **Table 5**, balances aviation, aviation support, indirect aviation and non-aviation uses. Approximately 450 acres are reserved for aviation-related uses, including aircraft manufacturing and parts distribution.

Aircraft manufacturing, with approximately 135 acres, is the largest land use in this scenario.

Land allocations for non-aviation uses were derived from the mid-range capture rate scenario. This concept also sets aside a 132-acre strategic land reserve for potential mega-developments.

| <p>Table 5</p> <p><b>SCENARIO 2 SPACE ALLOCATIONS</b></p> <p>Will Rogers World Airport Strategic Development Program</p> |                        |            |
|--|------------------------|------------|
| Type of Use  | Percent Site Occupancy | Acres      |
| <b>Direct Aviation</b>   |                        |            |
| Corporate Aviation   | 10%                    | 68         |
| Air Cargo  | 10%                    | 68         |
| Subtotal   | 20%                    | 135        |
| <b>Direct Aviation Support with Airside Access</b>   |                        |            |
| Aircraft Maintenance Facility  | 10%                    | 68         |
| Aircraft Manufacturing   | 20%                    | 135        |
| Subtotal   | 30%                    | 203        |
| <b>Direct Aviation Support without Airside Access</b>  |                        |            |
| Freight Forwarding (warehouse)   | 10%                    | 68         |
| Aircraft Parts Depot   | 3%                     | 20         |
| Subtotal   | 13%                    | 88         |
| <b>Indirect Aviation without Airside Access</b>  |                        |            |
| Retail - Indirect Aviation (supporting developed land uses)  | 4%                     | 27         |
| Subtotal   | 4%                     | 27         |
| <b>Non-aviation</b>  |                        |            |
| Industrial - Warehouse   | 6%                     | 37         |
| Industrial - Flex  | 1%                     | 9          |
| Office   | 1%                     | 7          |
| Retail - Other   | 6%                     | 38         |
| Subtotal   | 13%                    | 91         |
| <b>Strategic Land Reserve</b>  | 20%                    | 132        |
| <b>TOTAL</b>   | <b>100%</b>            | <b>677</b> |
| <p>Note: Numbers may not add up due to rounding.</p> <p>Source: Jacobs Consultancy.</p>                                  |                        |            |

### Scenario 3: Light Aviation Use

The light aviation use scenario described in **Table 6** generally has smaller development sizes. There could be more flexibility in substituting land uses at a later time due to the smaller parcels.

This concept has less aviation use (330 acres) and more non-aviation uses (131 acres). Land allocations for non-aviation uses were derived from the high-range capture rate.

A 214-acre strategic land reserve is set aside for potential mega-developments.

| Table 6   |                        |            |
|---|------------------------|------------|
| <b>SCENARIO 3 SPACE ALLOCATIONS</b>                         |                        |            |
| Will Rogers World Airport Strategic Development Program     |                        |            |
| Type of Use   | Percent Site Occupancy | Acres      |
| <b>Direct Aviation</b>                                      |                        |            |
| Corporate Aviation  | 10%                    | 68         |
| Air Cargo   | 10%                    | 68         |
| Subtotal  | 20%                    | 135        |
| <b>Direct Aviation Support with Airside Access</b>          |                        |            |
| Aircraft Maintenance Facility                               | 10%                    | 68         |
| Aircraft Manufacturing                                      | 0%                     | 0          |
| Subtotal  | 10%                    | 68         |
| <b>Direct Aviation Support without Airside Access</b>       |                        |            |
| Freight Forwarding (warehouse)                              | 10%                    | 68         |
| Aircraft Parts Depot  | 5%                     | 34         |
| Subtotal  | 15%                    | 102        |
| <b>Indirect Aviation without Airside Access</b>             |                        |            |
| Retail - Indirect Aviation (supporting developed land uses) | 4%                     | 27         |
| Subtotal  | 4%                     | 27         |
| <b>Non-aviation</b>   |                        |            |
| Industrial - Warehouse                                      | 8%                     | 54         |
| Industrial - Flex   | 2%                     | 13         |
| Office  | 2%                     | 11         |
| Retail - Other  | 8%                     | 54         |
| Subtotal  | 19%                    | 131        |
| <b>Strategic Land Reserve</b>                               | <b>32%</b>             | <b>214</b> |
| <b>TOTAL</b>  | <b>100%</b>            | <b>677</b> |
| Note: Numbers may not add up due to rounding.               |                        |            |
| Source: Jacobs Consultancy.                                 |                        |            |

## **C. Site Activity Forecasts and Facility Requirements**

### ***Site Activity Forecasts and Facility Requirements Methodology***

The activity forecasts and facility requirements are closely integrated in this analysis due to the greenfield nature of the site. Because the site is not developed, historical development and activity data are not available and traditional planning tools such as trend line analyses and existing space utilization evaluations cannot be used. Therefore the activity levels and space needs have been developed together in a linked, integrated manner.

For reference purposes, **Table 7** shows the summary of activity forecasts and facility requirements that are presented in detail in the following sections. In general, it can be noted that aviation land uses generates higher employment levels, more aircraft operations and vehicle trips than non-aviation uses. Scenarios 2 and 3 generates less activity than Scenario 1, not only because they have less aviation activity, but also because some land is set aside as reserve for potential large-scale developments.

Table 7

**SITE ACTIVITY FORECASTS AND FACILITY REQUIREMENTS SUMMARY**

Will Rogers World Airport Strategic Development Program

|   | Scenario 1<br>Heavy<br>aviation use | Scenario 2<br>Medium<br>aviation use | Scenario 3<br>Light<br>aviation use |
|---|-------------------------------------|--------------------------------------|-------------------------------------|
| <b>Site Activity Levels</b>                 |                                     |                                      |                                     |
| On-Site Employment                          | 9,540                               | 7,700                                | 8,050                               |
| Daily Truck Trips                           | 11,610                              | 8,120                                | 8,250                               |
| Daily Auto Trips                            | 20,880                              | 16,610                               | 17,310                              |
| Daily Aircraft Departures                   | 560                                 | 400                                  | 370                                 |
| Annual Aircraft Operations                  | 375,240                             | 253,700                              | 232,490                             |
| <b>Facilities Required (in Square Feet)</b> |                                     |                                      |                                     |
| Apron                                       | 8,565,600                           | 6,188,400                            | 3,945,800                           |
| Hangar                                      | 4,621,500                           | 3,535,500                            | 1,853,500                           |
| Warehouse                                   | 7,201,900                           | 5,587,600                            | 5,269,700                           |
| Office                                      | 1,816,500                           | 1,751,400                            | 1,673,100                           |
| Truck Staging                               | 1,209,400                           | 948,100                              | 1,027,300                           |
| Auto Parking                                | 4,572,700                           | 4,400,200                            | 4,911,000                           |
| Circulation/Greenspace Amount               | 1,371,800                           | 1,320,100                            | 1,473,300                           |
| Undeveloped Space                           | 0                                   | 5,758,900                            | 9,336,400                           |
| <b>Facilities Required (in Acres)</b>       |                                     |                                      |                                     |
| Apron                                       | 176                                 | 119                                  | 67                                  |
| Hangar                                      | 85                                  | 58                                   | 19                                  |
| Warehouse                                   | 165                                 | 128                                  | 121                                 |
| Office                                      | 40                                  | 38                                   | 36                                  |
| Truck Staging                               | 28                                  | 22                                   | 24                                  |
| Auto Parking                                | 92                                  | 86                                   | 98                                  |
| Circulation/Greenspace Amount               | 28                                  | 26                                   | 29                                  |
| Undeveloped Space                           | 0                                   | 132                                  | 214                                 |

Source: Jacobs Consultancy.

**Scenario 1 Site Activity Forecasts**

Scenario 1 site activity forecast summary:

- 9,540 jobs
- 32,490 daily vehicle trips
- 375,240 annual aircraft operations

In Scenario 1, the fully-developed air cargo component can be expected to handle approximately 700,000 enplaned tons of cargo. Including the freight forwarding component, this would translate into approximately 2,000 on-site jobs and 19,400

annual aircraft operations. The number of vehicle trips (defined as either daily arriving or departing vehicles) expected for the air cargo and freight forwarding segment would be approximately 10,160 trucks and 5,880 cars.

Aircraft maintenance, aircraft parts depot and manufacturing activities would generate approximately 5,450 jobs, 10,900 car trips, and 910 truck trips. Annual aircraft operations are estimated at 332,000, although some portion of these would be using the Airport for passenger and cargo operations with scheduled maintenance during off-peak times.

The other aviation uses in this category are corporate aviation facilities, which would generate 600 jobs and 24,190 annual aircraft operations. Also included is a small area reserved for ancillary retail uses. This is expected to be in support of the overall development and would not be a “destination” retail center attracting significant numbers of off-site customers. Truck trips for these two uses would be minimal compared to air cargo and aircraft maintenance, while car trips would total approximately 2,300 trips for both uses.

The non-aviation uses occupy only 8% of the site in this scenario, and represent a minimal portion of the activity generated. Industrial, office and retail development would generate approximately 900 jobs, 250 daily truck trips and 1,810 daily truck trips.

The site activity forecast for Scenario 1 is detailed in **Table 8**.

Table 8  
**SCENARIO 1 - SITE ACTIVITY FORECAST**  
 Will Rogers World Airport Strategic Development Program

| Type of Use  | On-Site<br>Employment | Daily<br>Truck<br>Trips | Daily<br>Auto<br>Trips | Daily<br>Aircraft<br>Departures | Annual<br>Aircraft<br>Operations |
|--|-----------------------|-------------------------|------------------------|---------------------------------|----------------------------------|
| <b>Direct Aviation</b>   |                       |                         |                        |                                 |                                  |
| Corporate Aviation   | 605                   | 19                      | 1,210                  | 76                              | 24,193                           |
| Air Cargo  | 879                   | 5,358                   | 3,572                  | 34                              | 19,347                           |
| Subtotal   | 1,484                 | 5,377                   | 4,781                  | 109                             | 43,541                           |
| <b>Direct Aviation Support with<br/>Airside Access</b>         |                       |                         |                        |                                 |                                  |
| Aircraft Maintenance Facility                                  | 1,005                 | 167                     | 2,009                  | 84                              | 61,119                           |
| Aircraft Manufacturing   | 1,967                 | 328                     | 3,933                  | 164                             | 119,643                          |
| Subtotal   | 2,971                 | 495                     | 5,943                  | 248                             | 180,762                          |
| <b>Direct Aviation Support without<br/>Airside Access</b>      |                       |                         |                        |                                 |                                  |
| Freight Forwarding (warehouse)                                 | 1,153                 | 4,806                   | 2,307                  | 0                               | 0                                |
| Aircraft Parts Depot   | 2,481                 | 414                     | 4,962                  | 207                             | 150,932                          |
| Subtotal   | 3,634                 | 5,219                   | 7,269                  | 207                             | 150,932                          |
| <b>Indirect Aviation without Airside<br/>Access</b>            |                       |                         |                        |                                 |                                  |
| Retail - Indirect Aviation<br>(supporting developed land uses) | 539                   | 270                     | 1,078                  | 0                               | 0                                |
| Subtotal   | 539                   | 270                     | 1,078                  | 0                               | 0                                |
| <b>Non-aviation</b>  |                       |                         |                        |                                 |                                  |
| Industrial - Warehouse   | 252                   | 21                      | 504                    | 0                               | 0                                |
| Industrial - Flex  | 46                    | 4                       | 93                     | 0                               | 0                                |
| Office   | 184                   | 9                       | 368                    | 0                               | 0                                |
| Retail - Other   | 424                   | 212                     | 847                    | 0                               | 0                                |
| Subtotal   | 906                   | 245                     | 1,812                  | 0                               | 0                                |
| <b>Strategic Land Reserve</b>                                  | 0                     | 0                       | 0                      | 0                               | 0                                |
| <b>TOTAL</b>   | 9,535                 | 11,606                  | 20,884                 | 564                             | 375,235                          |

Source: Jacobs Consultancy.

### ***Scenario 1 Facility Requirements***

Scenario 1 facility requirements summary:

- 8.5 million square feet of aircraft parking apron
- 4.6 million square feet of aircraft hangar
- 9 million square feet of warehouse and office space

Given the distribution of site acreages to the various land uses, facility space needs were developed concurrently with the activity forecasts. These requirements define the square footages for aircraft parking apron, hangar, warehouse, office, truck and auto parking, and internal circulation.

Aircraft parking apron would require much of the space within the development area. The 100 acres designated for air cargo uses could accommodate 2.7 million square feet of apron, while aircraft maintenance and manufacturing would require another 4.9 million square feet. Corporate aviation would require 0.9 million square feet of aircraft parking apron.

Approximately 0.9 million square feet of hangar space is designated for corporate aircraft facilities. Additional hangar space would be needed for aircraft manufacturing activities (2.4 million square feet) and for aircraft maintenance (1.3 million square feet). Warehouse space of 6.5 million square feet would be used by aviation activities.

Non aviation industrial uses would require 678,000 square feet of warehouse space. Office and retail activities would occupy 335,000 square feet.

An appropriate amount of space was allocated to each land use for truck staging and auto parking. The total for these paved areas for all uses would be approximately 5.8 million square feet. A 1.4 million square foot allowance was made for space within the site to be used for circulation/green space and landscaping. As detailed site plans are developed for each scenario, these facility requirements will be adjusted. The Scenario 1 facility space requirements are presented in presented in **Table 9**.

Table 9

**SCENARIO 1 - SPACE REQUIREMENTS**  
Will Rogers World Airport Strategic Development Program

| Type of Use  | Apron            | Hangar           | Warehouse        | Office           | Truck<br>Staging | Auto<br>Parking  | Circulation/<br>Greenspace<br>Amount | Undeveloped<br>Space | TOTAL (IN<br>SQUARE<br>FEET) | TOTAL<br>(IN<br>ACRES) |
|--|------------------|------------------|------------------|------------------|------------------|------------------|--------------------------------------|----------------------|------------------------------|------------------------|
| <b>Direct Aviation</b>   |                  |                  |                  |                  |                  |                  |                                      |                      |                              |                        |
| Corporate Aviation   | 907,244          | 907,244          | 0                | 90,724           | 0                | 567,028          | 170,108                              | 0                    | 2,642,350                    | 61                     |
| Air Cargo  | 2,705,939        | 0                | 1,014,727        | 101,473          | 405,891          | 135,297          | 40,589                               | 0                    | 4,403,916                    | 101                    |
| Subtotal   | 3,613,184        | 907,244          | 1,014,727        | 192,197          | 405,891          | 702,325          | 210,697                              | 0                    | 7,046,266                    | 162                    |
| <b>Direct Aviation Support with<br/>Airside Access</b>         |                  |                  |                  |                  |                  |                  |                                      |                      |                              |                        |
| Aircraft Maintenance Facility                                  | 1,674,493        | 1,255,870        | 627,935          | 251,174          | 50,235           | 418,623          | 125,587                              | 0                    | 4,403,916                    | 101                    |
| Aircraft Manufacturing   | 3,277,903        | 2,458,427        | 1,229,213        | 491,685          | 98,337           | 819,476          | 245,843                              | 0                    | 8,620,884                    | 198                    |
| Subtotal   | 4,952,395        | 3,714,297        | 1,857,148        | 742,859          | 148,572          | 1,238,099        | 371,430                              | 0                    | 13,024,800                   | 299                    |
| <b>Direct Aviation Support without<br/>Airside Access</b>      |                  |                  |                  |                  |                  |                  |                                      |                      |                              |                        |
| Freight Forwarding (warehouse)                                 | 0                | 0                | 3,652,309        | 192,227          | 384,454          | 134,559          | 40,368                               | 0                    | 4,403,916                    | 101                    |
| Aircraft Parts Depot   | 0                | 0                | 0                | 0                | 124,054          | 1,033,783        | 310,135                              | 0                    | 1,467,972                    | 34                     |
| Subtotal   | 0                | 0                | 3,652,309        | 192,227          | 508,508          | 1,168,342        | 350,503                              | 0                    | 5,871,888                    | 135                    |
| <b>Indirect Aviation without Airside<br/>Access</b>            |                  |                  |                  |                  |                  |                  |                                      |                      |                              |                        |
| Retail - Indirect Aviation<br>(supporting developed land uses) | 0                | 0                | 0                | 354,797          | 21,288           | 614,071          | 184,221                              | 0                    | 1,174,378                    | 27                     |
| Subtotal   | 0                | 0                | 0                | 354,797          | 21,288           | 614,071          | 184,221                              | 0                    | 1,174,378                    | 27                     |
| <b>Non-aviation</b>  |                  |                  |                  |                  |                  |                  |                                      |                      |                              |                        |
| Industrial - Warehouse   | 0                | 0                | 572,278          | 0                | 91,564           | 198,096          | 59,429                               | 0                    | 921,368                      | 21                     |
| Industrial - Flex  | 0                | 0                | 105,457          | 0                | 16,873           | 73,009           | 21,903                               | 0                    | 217,241                      | 5                      |
| Office   | 0                | 0                | 0                | 55,669           | 0                | 96,350           | 28,905                               | 0                    | 180,924                      | 4                      |
| Retail - Other   | 0                | 0                | 0                | 278,724          | 16,723           | 482,406          | 144,722                              | 0                    | 922,575                      | 21                     |
| Subtotal   | 0                | 0                | 677,735          | 334,393          | 125,161          | 849,862          | 254,958                              | 0                    | 2,242,109                    | 51                     |
| <b>Strategic Land Reserve</b>                                  | 0                | 0                | 0                | 0                | 0                | 0                | 0                                    | 0                    | 0                            | 0                      |
| <b>TOTAL (IN SQUARE FEET)</b>                                  | <b>8,565,579</b> | <b>4,621,541</b> | <b>7,201,920</b> | <b>1,816,473</b> | <b>1,209,419</b> | <b>4,572,699</b> | <b>1,371,810</b>                     | <b>0</b>             |                              |                        |
| <b>TOTAL (IN ACRES)</b>  | <b>197</b>       | <b>106</b>       | <b>165</b>       | <b>42</b>        | <b>28</b>        | <b>105</b>       | <b>31</b>                            | <b>0</b>             |                              |                        |

Note: All space requirements are in square feet.

Source: Jacobs Consultancy.



### ***Scenario 2 Site Activity Forecasts***

Scenario 2 activity forecast summary:

- 7,700 jobs
- 24,730 daily vehicle trips
- 253,700 annual aircraft operations

Scenario 2 divides the land uses in the development area between aviation related and non-aviation uses and forecasts were developed to represent the expected number of employees and vehicle trips.

Freight activity, including air cargo and freight forwarding, would be expected to generate 1,360 jobs, 6,800 daily truck trips and 3,930 daily auto trips. Air cargo operations are projected to generate 12,960 annual aircraft operations.

Corporate aviation could employ 675 people and generate 1,350 daily auto trips and 27,000 annual aircraft operations.

The non-aviation uses occupy 13% of the site in this scenario. Industrial, office and retail development would generate approximately 1,605 jobs, 435 daily truck trips and 3,210 daily truck trips.

The employment and activity generated by the land uses in Scenario 2 are presented in **Table 10**.

Table 10

**SCENARIO 2 - SITE ACTIVITY FORECAST**

Will Rogers World Airport Strategic Development Program

| Type of Use  | On-Site<br>Employment | Daily<br>Truck<br>Trips | Daily<br>Auto<br>Trips | Daily<br>Aircraft<br>Departures | Annual<br>Aircraft<br>Operations |
|--|-----------------------|-------------------------|------------------------|---------------------------------|----------------------------------|
| <b>Direct Aviation</b>   |                       |                         |                        |                                 |                                  |
| Corporate Aviation   | 675                   | 21                      | 1,350                  | 84                              | 27,001                           |
| Air Cargo  | 589                   | 3,588                   | 2,392                  | 23                              | 12,956                           |
| Subtotal   | 1,264                 | 3,609                   | 3,742                  | 107                             | 39,957                           |
| <b>Direct Aviation Support with<br/>Airside Access</b>         |                       |                         |                        |                                 |                                  |
| Aircraft Maintenance Facility                                  | 673                   | 112                     | 1,346                  | 56                              | 40,927                           |
| Aircraft Manufacturing   | 1,346                 | 224                     | 2,691                  | 112                             | 81,855                           |
| Subtotal   | 2,018                 | 336                     | 4,037                  | 168                             | 122,782                          |
| <b>Direct Aviation Support without<br/>Airside Access</b>      |                       |                         |                        |                                 |                                  |
| Freight Forwarding (warehouse)                                 | 772                   | 3,218                   | 1,545                  | 0                               | 0                                |
| Aircraft Parts Depot   | 1,495                 | 249                     | 2,991                  | 125                             | 90,962                           |
| Subtotal   | 2,268                 | 3,467                   | 4,535                  | 125                             | 90,962                           |
| <b>Indirect Aviation without Airside<br/>Access</b>            |                       |                         |                        |                                 |                                  |
| Retail - Indirect Aviation<br>(supporting developed land uses) | 542                   | 271                     | 1,083                  | 0                               | 0                                |
| Subtotal   | 542                   | 271                     | 1,083                  | 0                               | 0                                |
| <b>Non-aviation</b>  |                       |                         |                        |                                 |                                  |
| Industrial - Warehouse   | 446                   | 37                      | 892                    | 0                               | 0                                |
| Industrial - Flex  | 82                    | 7                       | 164                    | 0                               | 0                                |
| Office   | 326                   | 16                      | 653                    | 0                               | 0                                |
| Retail - Other   | 751                   | 375                     | 1,501                  | 0                               | 0                                |
| Subtotal   | 1,605                 | 435                     | 3,211                  | 0                               | 0                                |
| <b>Strategic Land Reserve</b>                                  | 0                     | 0                       | 0                      | 0                               | 0                                |
| <b>TOTAL</b>   | <b>7,697</b>          | <b>8,118</b>            | <b>16,608</b>          | <b>400</b>                      | <b>253,701</b>                   |

Source: Jacobs Consultancy.

## ***Scenario 2 Facility Requirements***

Scenario 2 facility requirements summary:

- 6.2 million square feet of aircraft parking apron
- 3.5 million square feet of aircraft hangar
- 5.6 million square feet of warehouse
- 1.8 million square feet of office space

In Scenario 2, freight activity, including air cargo and freight forwarding, is expected to require 1.8 million square feet of apron, 3.1 million square feet of warehouse and 200,000 square feet of office space. The total area set aside for freight-related activities would be 136 acres.

The second largest land use in this scenario would be aircraft manufacturing. The 135 acres designated for this use can accommodate 2.2 million square feet of apron and 1.7 million square feet of hangar space. Additionally, 68 acres were set aside for both corporate aviation and aircraft maintenance activities.

Non aviation industrial uses require 1.2 million square feet of warehouse space. Office and retail activities occupy 705,000 square feet.

An appropriate amount of space was allocated to each land use for truck staging and auto parking. The total for these paved areas for all uses would be approximately 5.3 million square feet. A 1.3 million square foot allowance was made for space within the site to be used for circulation/green space and landscaping. A 132-acre land reserve was set aside for large-scale developments. The complete Scenario 2 facility space requirements are presented in **Table 11**.

Table 11

**SCENARIO 2 - SPACE REQUIREMENTS**  
Will Rogers World Airport Strategic Development Program

| Type of Use  | Apron            | Hangar           | Warehouse        | Office           | Truck<br>Staging | Auto<br>Parking  | Circulation/<br>Greenspace<br>Amount | Undeveloped<br>Space | TOTAL (IN<br>SQUARE<br>FEET) | TOTAL<br>(IN<br>ACRES) |
|--|------------------|------------------|------------------|------------------|------------------|------------------|--------------------------------------|----------------------|------------------------------|------------------------|
| <b>Direct Aviation</b>   |                  |                  |                  |                  |                  |                  |                                      |                      |                              |                        |
| Corporate Aviation   | 1,012,536        | 1,012,536        | 0                | 101,254          | 0                | 632,835          | 189,851                              | 0                    | 2,949,012                    | 68                     |
| Air Cargo  | 1,811,989        | 0                | 679,496          | 67,950           | 271,798          | 90,599           | 27,180                               | 0                    | 2,949,012                    | 68                     |
| Subtotal   | 2,824,525        | 1,012,536        | 679,496          | 169,203          | 271,798          | 723,435          | 217,030                              | 0                    | 5,898,024                    | 135                    |
| <b>Direct Aviation Support with<br/>Airside Access</b>         |                  |                  |                  |                  |                  |                  |                                      |                      |                              |                        |
| Aircraft Maintenance Facility                                  | 1,121,297        | 840,973          | 420,487          | 168,195          | 33,639           | 280,324          | 84,097                               | 0                    | 2,949,012                    | 68                     |
| Aircraft Manufacturing   | 2,242,595        | 1,681,946        | 840,973          | 336,389          | 67,278           | 560,649          | 168,195                              | 0                    | 5,898,024                    | 135                    |
| Subtotal   | 3,363,892        | 2,522,919        | 1,261,460        | 504,584          | 100,917          | 840,973          | 252,292                              | 0                    | 8,847,036                    | 203                    |
| <b>Direct Aviation Support without<br/>Airside Access</b>      |                  |                  |                  |                  |                  |                  |                                      |                      |                              |                        |
| Freight Forwarding (warehouse)                                 | 0                | 0                | 2,445,711        | 128,722          | 257,443          | 90,105           | 27,032                               | 0                    | 2,949,012                    | 68                     |
| Aircraft Parts Depot   | 0                | 0                | 0                | 0                | 74,764           | 623,031          | 186,909                              | 0                    | 884,704                      | 20                     |
| Subtotal   | 0                | 0                | 2,445,711        | 128,722          | 332,207          | 713,136          | 213,941                              | 0                    | 3,833,716                    | 88                     |
| <b>Indirect Aviation without Airside<br/>Access</b>            |                  |                  |                  |                  |                  |                  |                                      |                      |                              |                        |
| Retail - Indirect Aviation<br>(supporting developed land uses) | 0                | 0                | 0                | 356,376          | 21,383           | 616,805          | 185,041                              | 0                    | 1,179,605                    | 27                     |
| Subtotal   | 0                | 0                | 0                | 356,376          | 21,383           | 616,805          | 185,041                              | 0                    | 1,179,605                    | 27                     |
| <b>Non-aviation</b>  |                  |                  |                  |                  |                  |                  |                                      |                      |                              |                        |
| Industrial - Warehouse   | 0                | 0                | 1,014,027        | 0                | 162,244          | 351,009          | 105,303                              | 0                    | 1,632,584                    | 37                     |
| Industrial - Flex  | 0                | 0                | 186,861          | 0                | 29,898           | 129,365          | 38,810                               | 0                    | 384,933                      | 9                      |
| Office   | 0                | 0                | 0                | 98,641           | 0                | 170,724          | 51,217                               | 0                    | 320,582                      | 7                      |
| Retail - Other   | 0                | 0                | 0                | 493,874          | 29,632           | 854,782          | 256,435                              | 0                    | 1,634,724                    | 38                     |
| Subtotal   | 0                | 0                | 1,200,888        | 592,515          | 221,774          | 1,505,881        | 451,764                              | 0                    | 3,972,823                    | 91                     |
| <b>Strategic Land Reserve</b>                                  | 0                | 0                | 0                | 0                | 0                | 0                | 0                                    | 5,758,917            | 5,758,917                    | 132                    |
| <b>TOTAL (IN SQUARE FEET)</b>                                  | <b>6,188,417</b> | <b>3,535,455</b> | <b>5,587,554</b> | <b>1,751,400</b> | <b>948,079</b>   | <b>4,400,229</b> | <b>1,320,069</b>                     | <b>5,758,917</b>     |                              |                        |
| <b>TOTAL (IN ACRES)</b>  | <b>142</b>       | <b>81</b>        | <b>128</b>       | <b>40</b>        | <b>22</b>        | <b>101</b>       | <b>30</b>                            | <b>132</b>           |                              |                        |

Note: All space requirements are in square feet.

Source: Jacobs Consultancy.

### ***Scenario 3 Site Activity Forecasts***

Scenario 3 site activity forecast summary:

- 8,050 jobs
- 25,560 daily vehicle trips
- 232,490 annual aircraft operations

In Scenario 3, the fully-developed air cargo component could be expected to handle approximately 500,000 enplaned tons of cargo. Including the freight forwarding component, this would translate into approximately 1,400 on-site jobs and 13,000 annual aircraft operations. The number of vehicle trips expected for the air cargo and freight forwarding segment would be approximately 6,800 trucks and 3,900 cars.

Aircraft maintenance and aircraft parts depot would generate approximately 3,200 jobs, 6,330 car trips, and 530 truck trips. This scenario does not include aircraft manufacturing. The other aviation use would be corporate aviation facilities, which would generate 700 jobs and 27,000 annual aircraft operations. Also included is a small area reserved for ancillary retail uses.

Annual aircraft operations are estimated at 232,500, although some portion of these would be using the Airport for passenger and cargo operations with scheduled maintenance during off-peak times.

The non-aviation uses occupy 19% of the site in this scenario. Industrial, office and retail development would generate approximately 2,7300 jobs, 625 daily truck trips and 4,600 daily truck trips.

**Table 12** presents the site activity forecast detail for Scenario 3.

Table 12

**SCENARIO 3 - SITE ACTIVITY FORECAST**  
Will Rogers World Airport Strategic Development Program

| Type of Use  | On-Site<br>Employment | Daily<br>Truck<br>Trips | Daily<br>Auto<br>Trips | Daily<br>Aircraft<br>Departures | Annual<br>Aircraft<br>Operations |
|--|-----------------------|-------------------------|------------------------|---------------------------------|----------------------------------|
| <b>Direct Aviation</b>   |                       |                         |                        |                                 |                                  |
| Corporate Aviation   | 675                   | 21                      | 1,350                  | 84                              | 27,001                           |
| Air Cargo  | 589                   | 3,588                   | 2,392                  | 23                              | 12,956                           |
| Subtotal   | 1,264                 | 3,609                   | 3,742                  | 107                             | 39,957                           |
| <b>Direct Aviation Support with<br/>Airside Access</b>         |                       |                         |                        |                                 |                                  |
| Aircraft Maintenance Facility                                  | 673                   | 112                     | 1,346                  | 56                              | 40,927                           |
| Aircraft Manufacturing   | 0                     | 0                       | 0                      | 0                               | 0                                |
| Subtotal   | 673                   | 112                     | 1,346                  | 56                              | 40,927                           |
| <b>Direct Aviation Support without<br/>Airside Access</b>      |                       |                         |                        |                                 |                                  |
| Freight Forwarding (warehouse)                                 | 772                   | 3,218                   | 1,545                  | 0                               | 0                                |
| Aircraft Parts Depot   | 2,492                 | 415                     | 4,984                  | 208                             | 151,604                          |
| Subtotal   | 3,264                 | 3,633                   | 6,529                  | 208                             | 151,604                          |
| <b>Indirect Aviation without Airside<br/>Access</b>            |                       |                         |                        |                                 |                                  |
| Retail - Indirect Aviation<br>(supporting developed land uses) | 542                   | 271                     | 1,083                  | 0                               | 0                                |
| Subtotal   | 542                   | 271                     | 1,083                  | 0                               | 0                                |
| <b>Non-aviation</b>  |                       |                         |                        |                                 |                                  |
| Industrial - Warehouse   | 641                   | 52                      | 1,281                  | 0                               | 0                                |
| Industrial - Flex  | 118                   | 10                      | 236                    | 0                               | 0                                |
| Office   | 469                   | 23                      | 937                    | 0                               | 0                                |
| Retail - Other   | 1,078                 | 539                     | 2,155                  | 0                               | 0                                |
| Subtotal   | 2,305                 | 624                     | 4,610                  | 0                               | 0                                |
| <b>Strategic Land Reserve</b>                                  | 0                     | 0                       | 0                      | 0                               | 0                                |
| <b>TOTAL</b>   | <b>8,048</b>          | <b>8,249</b>            | <b>17,309</b>          | <b>371</b>                      | <b>232,488</b>                   |

Source: Jacobs Consultancy.

### ***Scenario 3 Facility Requirements***

Scenario 3 facility requirements summary:

- 3.9 million s.f. aircraft parking apron
- 1.8 million s.f. aircraft hangar
- 5.8 million s.f. warehouse
- 1.9 million s.f. office space

In Scenario 3, aviation uses (air cargo, corporate aviation, aircraft maintenance) require 3.9 million square feet of aircraft parking apron, 1.8 million square feet of hangar facilities and 470,000 square feet of office space.

The non-aviation sector will require 2.3 million square feet of warehouse, 1.4 million square feet of office space and 3 million square feet of auto parking.

Like the previous scenarios, space was allocated for truck and auto parking along with an allowance for circulation and unusable space. The detailed space breakdown is presented in **Table 13**.

Table 13

**SCENARIO 3 - SPACE REQUIREMENTS**  
Will Rogers World Airport Strategic Development Program

| Type of Use  | Apron            | Hangar           | Warehouse        | Office           | Truck Staging    | Auto Parking     | Circulation/<br>Greenspace<br>Amount | Undeveloped<br>Space | TOTAL<br>(IN<br>SQUARE<br>FEET) | TOTAL<br>(IN<br>ACRES) |
|--|------------------|------------------|------------------|------------------|------------------|------------------|--------------------------------------|----------------------|---------------------------------|------------------------|
| <b>Direct Aviation</b>   |                  |                  |                  |                  |                  |                  |                                      |                      |                                 |                        |
| Corporate Aviation   | 1,012,536        | 1,012,536        | 0                | 101,254          | 0                | 632,835          | 189,851                              | 0                    | 2,949,012                       | 68                     |
| Air Cargo  | 1,811,989        | 0                | 679,496          | 67,950           | 271,798          | 90,599           | 27,180                               | 0                    | 2,949,012                       | 68                     |
| Subtotal   | 2,824,525        | 1,012,536        | 679,496          | 169,203          | 271,798          | 723,435          | 217,030                              | 0                    | 5,898,024                       | 135                    |
| <b>Direct Aviation Support with<br/>Airside Access</b>         |                  |                  |                  |                  |                  |                  |                                      |                      |                                 |                        |
| Aircraft Maintenance Facility                                  | 1,121,297        | 840,973          | 420,487          | 168,195          | 33,639           | 280,324          | 84,097                               | 0                    | 2,949,012                       | 68                     |
| Aircraft Manufacturing   | 0                | 0                | 0                | 0                | 0                | 0                | 0                                    | 0                    | 0                               | 0                      |
| Subtotal   | 1,121,297        | 840,973          | 420,487          | 168,195          | 33,639           | 280,324          | 84,097                               | 0                    | 2,949,012                       | 68                     |
| <b>Direct Aviation Support without<br/>Airside Access</b>      |                  |                  |                  |                  |                  |                  |                                      |                      |                                 |                        |
| Freight Forwarding (warehouse)                                 | 0                | 0                | 2,445,711        | 128,722          | 257,443          | 90,105           | 27,032                               | 0                    | 2,949,012                       | 68                     |
| Aircraft Parts Depot   | 0                | 0                | 0                | 0                | 124,606          | 1,038,385        | 311,515                              | 0                    | 1,474,506                       | 34                     |
| Subtotal   | 0                | 0                | 2,445,711        | 128,722          | 382,049          | 1,128,490        | 338,547                              | 0                    | 4,423,518                       | 102                    |
| <b>Indirect Aviation without Airside<br/>Access</b>            |                  |                  |                  |                  |                  |                  |                                      |                      |                                 |                        |
| Retail - Indirect Aviation<br>(supporting developed land uses) | 0                | 0                | 0                | 356,376          | 21,383           | 616,805          | 185,041                              | 0                    | 1,179,605                       | 27                     |
| Subtotal   | 0                | 0                | 0                | 356,376          | 21,383           | 616,805          | 185,041                              | 0                    | 1,179,605                       | 27                     |
| <b>Non-aviation</b>  |                  |                  |                  |                  |                  |                  |                                      |                      |                                 |                        |
| Industrial - Warehouse   | 0                | 0                | 1,455,776        | 0                | 232,924          | 503,922          | 151,177                              | 0                    | 2,343,800                       | 54                     |
| Industrial - Flex  | 0                | 0                | 268,264          | 0                | 42,922           | 185,721          | 55,716                               | 0                    | 552,624                         | 13                     |
| Office   | 0                | 0                | 0                | 141,612          | 0                | 245,098          | 73,530                               | 0                    | 460,240                         | 11                     |
| Retail - Other   | 0                | 0                | 0                | 709,025          | 42,541           | 1,227,158        | 368,147                              | 0                    | 2,346,872                       | 54                     |
| Subtotal   | 0                | 0                | 1,724,040        | 850,637          | 318,388          | 2,161,901        | 648,570                              | 0                    | 5,703,536                       | 131                    |
| <b>Strategic Land Reserve</b>                                  | 0                | 0                | 0                | 0                | 0                | 0                | 0                                    | 9,336,425            | 9,336,425                       |                        |
| <b>TOTAL (IN SQUARE FEET)</b>                                  | <b>3,945,823</b> | <b>1,853,509</b> | <b>5,269,733</b> | <b>1,673,133</b> | <b>1,027,257</b> | <b>4,910,954</b> | <b>1,473,286</b>                     | <b>9,336,425</b>     |                                 |                        |
| <b>TOTAL (IN ACRES)</b>  | <b>91</b>        | <b>43</b>        | <b>121</b>       | <b>38</b>        | <b>24</b>        | <b>113</b>       | <b>34</b>                            | <b>214</b>           |                                 |                        |

Note: All space requirements are in square feet.

Source: Jacobs Consultancy.



## 5. DEVELOPMENT ALTERNATIVES

### A. Initial Evaluation Screening

A two-level screening and evaluative refinement process was employed. In initial screening, each scenario as defined in the previous chapter was reviewed to determine whether or not it would fully or partially achieve the objectives delineated in the Strategic Assessment.

Evaluation of the preliminary scenarios against the objectives was presented to the Steering Committee on August 15<sup>th</sup>, 2008. It was determined that the light aviation scenario would not promote highest and best use for the site, and would not maximize the potential for aviation-related development in the Development Area. This scenario was therefore found ineffective in meeting the goals and objectives set forth by the Steering Committee and were eliminated from further consideration.

### B. Development Alternatives

Site development layouts were formulated based on the 2 scenarios—heavy aviation use and medium aviation use—selected for further analysis. The layouts were designed to provide a flexible land use plan that identifies the highest and best uses for the property and capitalizes on the Airport's assets.

The assumptions and background for the development scenarios are described below.

#### ***General Assumptions***

The developable area, shown on **Figure 7**, is approximately 680 acres. In determining the developable area, roadways, utilities corridors, public water supply wells, oil wells, and wetlands land uses were removed from the total acreage because these areas would not be available for tenant development.

Provisions have been made for the extension of Taxiways G, H1 and H2 and a 320-foot wide Taxiway Object Free Area has been reserved, meeting FAA requirements for Airplane Design Group (ADG) V aircraft, ADG V being the design criteria for the airfield per the Master Plan.

It is assumed that property directly adjacent to the airfield will be used for aviation purposes in all scenarios as this represents the highest and best use of that property. The site would be configured to allow maximum flexibility in substituting land uses as the site is developed.

Two of the layouts include a strategic land reserve that can be made available for large-scale land uses in response to market demand.

### **Site Access**

The primary access to the development area is via 89<sup>th</sup> Street and 74<sup>th</sup> Street, both of which have existing interchanges with nearby Interstate 44. Additional access is provided from the south by 104<sup>th</sup> Street and from the north, including the Airport Terminal area, by 59<sup>th</sup> Street.

### **Roadway Configuration**

All concepts include the relocation of Portland Avenue east of its current location. Two roadway configurations were developed and evaluated to determine the optimal configuration for the site: the frontage road concept and the spine road concept.

**Frontage Road Concept.** The frontage road would ultimately be a five-lane avenue (two lanes in each direction and a median) which connects 59<sup>th</sup> Street on the north end of the development area with 104<sup>th</sup> Street on the south end. It is likely to be named Portland Avenue when the existing Portland Avenue is closed between 74<sup>th</sup> Street and 104<sup>th</sup> Street. It could be constructed initially as a three-lane road, with planned expansion capability.

Development parcels with access from the frontage road would be very attractive for commercial developers as they would have high visibility from and good access to the Interstate. The separation between the highway and the frontage road, for the most part, is not intended to be sufficient to allow for the development of land between the two roadways, but would facilitate the creation of a landscaping buffer.

It is assumed that signalized control would be utilized at the intersections of 1) Portland Avenue and 74<sup>th</sup> Street, and 2) Portland Avenue and 89<sup>th</sup> Street. At both intersections, Portland Avenue would be offset to the west to provide sufficient space, between the potentially signalized highway ramp intersections and the frontage road, for vehicles to queue at the signals.

South of 89<sup>th</sup> Street, the frontage road would be offset from the highway by a distance to which is not sufficient to allow development between the Frontage road and the highway. The southern terminus of the frontage road would be near the existing interchange with Interstate Highway 44 and 104<sup>th</sup> Street. As shown, potential modifications to the interchange may be necessary to provide sufficient vehicle queuing space for any signalized controls on 104<sup>th</sup> Street.

A second road – the “horseshoe” road – would serve the central development area. The horseshoe road ultimately would be a five-lane avenue connection between the existing 74<sup>th</sup> Street and the existing 89<sup>th</sup> Street. In this configuration, with Portland Avenue relocated to the east as a highway frontage road, the separation between the highway and the avenue would be sufficient to develop parcels between the two roads. All parcels along the horseshoe road are considered to have good highway access since vehicles existing Interstate 44 would not have to make any turns off of 74<sup>th</sup> Street or 89<sup>th</sup> Street to reach the aviation designated sites.

**Spine Road Concept.** The spine road would be a five-lane avenue (two lanes in each direction and a median) which connects 59<sup>th</sup> Street on the north end of the development area with 104<sup>th</sup> Street on the south end. It would likely be named Portland Avenue when the existing Portland Avenue is closed between 74<sup>th</sup> Street and 104<sup>th</sup> Street.

The spine road would provide access to all non-aviation development parcels. The separation between Interstate Highway 44 and the spine road would be sufficient to allow for the development of land between the two roadways. Developers would have the option of fronting on the highly attractive and visible side of highway frontage parcels and/or on the spine road side of those parcels.

It is assumed that signalized control would be utilized at the intersections of 1) Portland Avenue and 74<sup>th</sup> Street, and 2) Portland Avenue and 89<sup>th</sup> Street. At both intersections, Portland Avenue would be offset to the west to provide sufficient space, between the potentially signalized highway ramp intersections and the frontage road, for vehicles to queue at the signals.

South of 89<sup>th</sup> Street, the spine road would be offset from the highway by a distance sufficient to allow development between the Spine road and the highway. The southern terminus of the Spine road would be near the existing intersection of Portland Ave and 104<sup>th</sup> Street.

As in the “Frontage road” concept, a second road – the “horseshoe” road – would connect 74<sup>th</sup> Street and 89<sup>th</sup> Street.

### ***Utilities***

Provisions have been made for the installation of the utilities within a corridor located along relocated Portland Avenue. The existing utilities corridor located along existing Portland Avenue would be maintained operational in its entirety due to the high cost that would be associated with relocating it.

### ***Land Uses***

For each scenario, parcels were divided into five categories:

- Aviation-related with airfield access: air cargo, corporate aviation, aircraft maintenance facility, aircraft manufacturing. Maximizing the aviation use necessitating airfield access may require the extension of additional taxiways to the east to provide airfield access to more parcels than in the current airfield configuration.
- Aviation-related without airfield access: freight forwarding (warehouse), aircraft parts depot, retail - indirect aviation
- Non-aviation: commercial real estate product types including industrial – warehouse, industrial – flex, office and retail

- Land available after airfield expansion: this land is outside but adjacent to the Development Area. These parcels are currently used for the airfield, either by taxiways or are located in the current Runway Protection Zones (RPZ). The RPZs are zones of trapezoidal shape located at the runway ends and meant to protect the area on the ground beneath the approach surface to a runway. It is noted that the Master Plan recommends the extension of Runway 17L-35R by 2,200 feet to the south. This would displace the RPZ and open more land for aviation-related development. Extending the runway would also require relocating the glideslope antenna. This would allow for the relocation of the southern portion of Taxiway H closer to the runway and for the expansion of the adjacent parcels to the west.
- Strategic land reserve

### ***Development Alternatives***

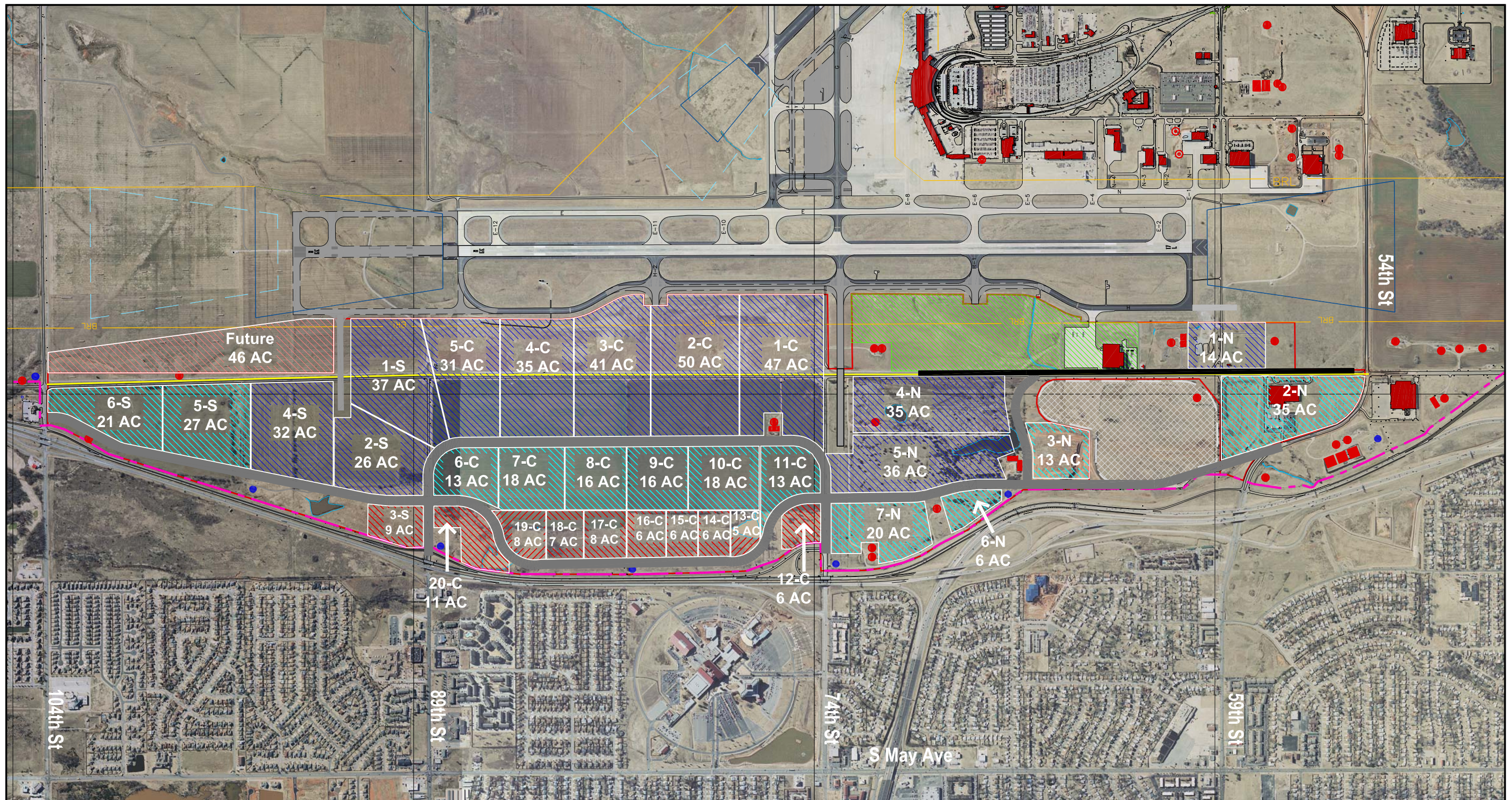
The four development scenarios are illustrated below:

- Heavy aviation use scenario with frontage road – see **Figure 8**
- Heavy aviation use scenario with spine road – see **Figure 9**
- Medium aviation use scenario with frontage road – see **Figure 10**
- Medium aviation use scenario with spine road – see **Figure 11**

### ***Preferred Development Alternative Selection***

The recommended plan was formulated by combining the most favorable aspects of each of the four development concepts; however it most closely reflects the planning of the heavy aviation scenario with spine road. The characteristics of the final plan are described in the following chapter.





#### LEGEND

- |  |   |  |  |
|--|---|--|--|
|  | Existing airport property line            |  | Existing utilities corridor              |
|  | Development area                          |  | Stormwater detention pond                |
|  | Land developable after airfield expansion |  | Water well                               |
|  | Future airfield expansion                 |  |  |
|  | Existing Runway Protection Zone           |  | Existing road to remain                  |
|  | Future Runway Protection Zone             |  | Proposed road and utilities right-of-way |
|  | Building restriction line                 |  |  |

#### LAND USES

- |  |   |
|--|---|
|  | Direct Aviation and Direct Aviation Support — w/ airfield access (384 acres)        |
|  | Direct Aviation Support and Indirect Aviation — w/o airfield access (216 acres)     |
|  | Nonaeronautical (72 acres)  |
|  | Land available for aviation-related development after airfield expansion (46 acres) |



0 625 1250 2500

Scale: 1" = 1250'

Source: Airport Layout Plan provided by Barnard Dunkelberg

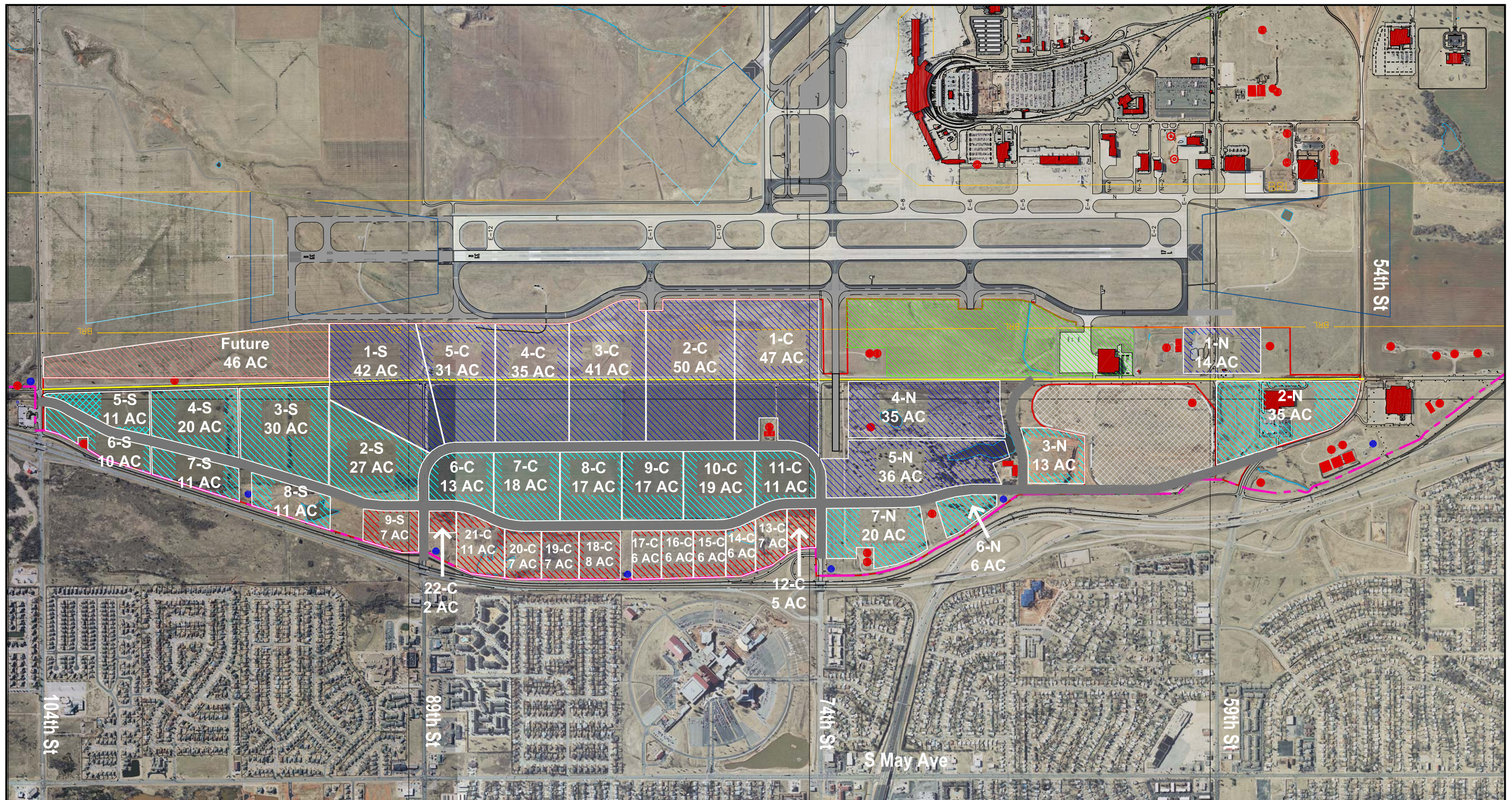
**Figure 8**  
**HEAVY AVIATION USE SCENARIO WITH**  
**FRONTAGE ROAD**

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Oklahoma City Will Rogers World Airport

July 2009

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#### LEGEND

- |  |   |  |  |
|--|---|--|--|
|  | Existing airport property line            |  | Existing utilities corridor              |
|  | Development area                          |  | Stormwater detention pond                |
|  | Land developable after airfield expansion |  | Water well                               |
|  | Future airfield expansion                 |  |  |
|  | Existing Runway Protection Zone           |  | Existing road to remain                  |
|  | Future Runway Protection Zone             |  | Proposed road and utilities right-of-way |
|  | Building restriction line                 |  |  |

#### LAND USES

- |  |   |
|--|---|
|  | Direct Aviation and Direct Aviation Support — w/ airfield access (331 acres)        |
|  | Direct Aviation Support and Indirect Aviation — w/o airfield access (289 acres)     |
|  | Nonaeronautical (78 acres)  |
|  | Land available for aviation-related development after airfield expansion (46 acres) |



0 625 1250 2500

Scale: 1" = 1250'

Source: Airport Layout Plan provided by Barnard Dunkelberg

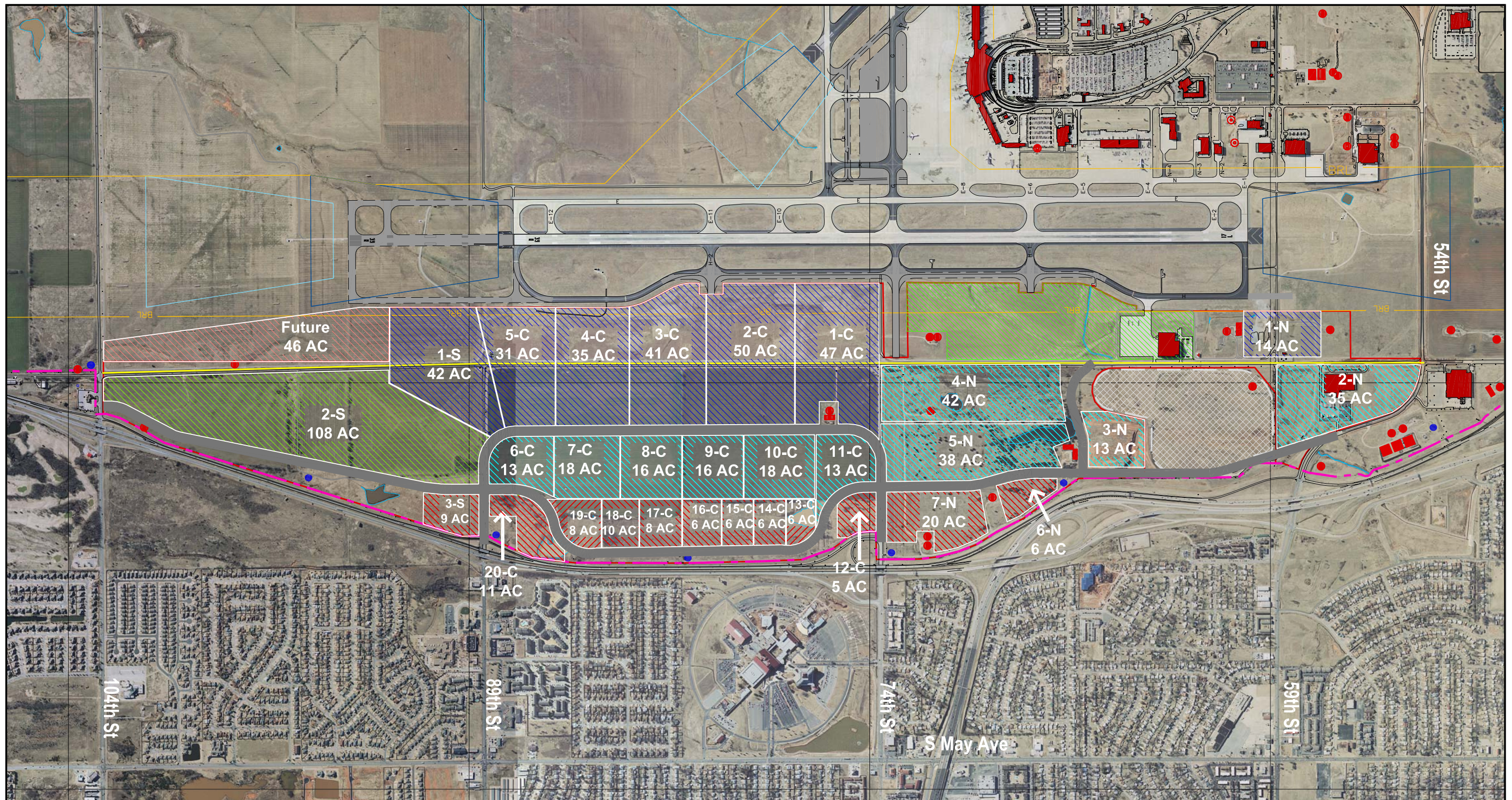
**Figure 9**  
**HEAVY AVIATION USE SCENARIO WITH**  
**SPINE ROAD**

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#### LEGEND

- |  |   |  |  |
|--|---|--|--|
|  | Existing airport property line            |  | Existing utilities corridor              |
|  | Development area                          |  | Stormwater detention pond                |
|  | Land developable after airfield expansion |  | Water well                               |
|  | Future airfield expansion                 |  |  |
|  | Existing Runway Protection Zone           |  | Existing road to remain                  |
|  | Future Runway Protection Zone             |  | Proposed road and utilities right-of-way |
|  | Building restriction line                 |  |  |

#### LAND USES

- |  |   |
|--|---|
|  | Direct Aviation and Direct Aviation Support — w/ airfield access (260 acres)        |
|  | Direct Aviation Support and Indirect Aviation — w/o airfield access (222 acres)     |
|  | Nonaeronautical (101 acres)   |
|  | Strategic land reserve (108 acres)  |
|  | Land available for aviation-related development after airfield expansion (46 acres) |



NORTH

0 625 1250 2500

Scale: 1" = 1250'

Source: Airport Layout Plan provided by Barnard Dunkelberg

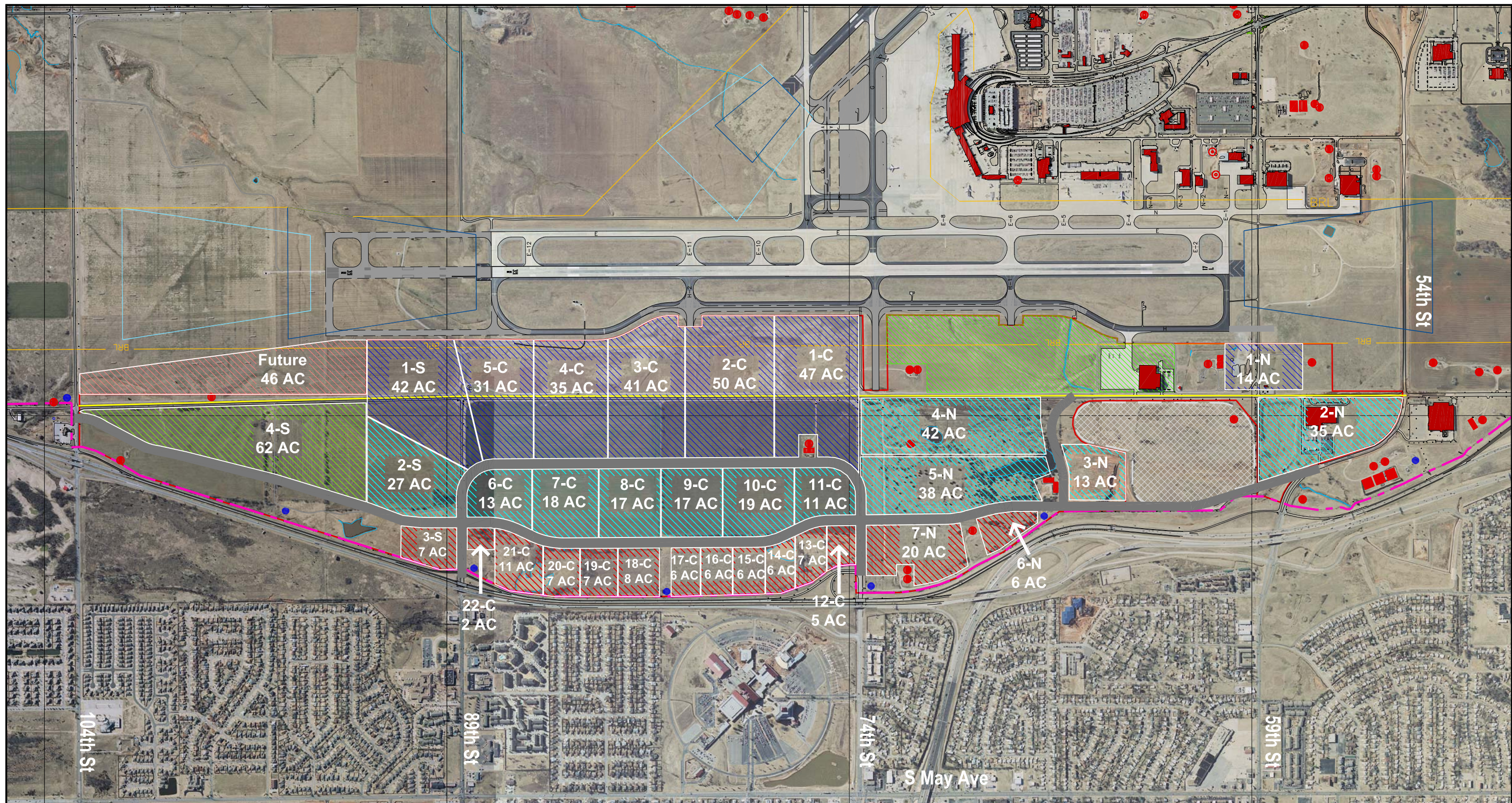
#### Figure 10 MEDIUM AVIATION USE SCENARIO WITH FRONTAGE ROAD

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#### LEGEND

- |  |   |  |  |
|--|---|--|--|
|  | Existing airport property line            |  | Existing utilities corridor              |
|  | Development area                          |  | Stormwater detention pond                |
|  | Land developable after airfield expansion |  | Water well                               |
|  | Future airfield expansion                 |  | Existing road to remain                  |
|  | Existing Runway Protection Zone           |  | Proposed road and utilities right-of-way |
|  | Future Runway Protection Zone             |  |  |
|  | Building restriction line                 |  |  |

#### LAND USES

- |  |   |
|--|---|
|  | Direct Aviation and Direct Aviation Support — w/ airfield access (260 acres)        |
|  | Direct Aviation Support and Indirect Aviation — w/o airfield access (250 acres)     |
|  | Nonaeronautical (104 acres)   |
|  | Strategic land reserve (62 acres)   |
|  | Land available for aviation-related development after airfield expansion (46 acres) |



NORTH

0 625 1250 2500

Scale: 1" = 1250'

Source: Airport Layout Plan provided by Barnard Dunkelberg

**Figure 11**  
**MEDIUM AVIATION USE SCENARIO WITH**  
**SPINE ROAD**

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## 6. RECOMMENDED DEVELOPMENT PLAN

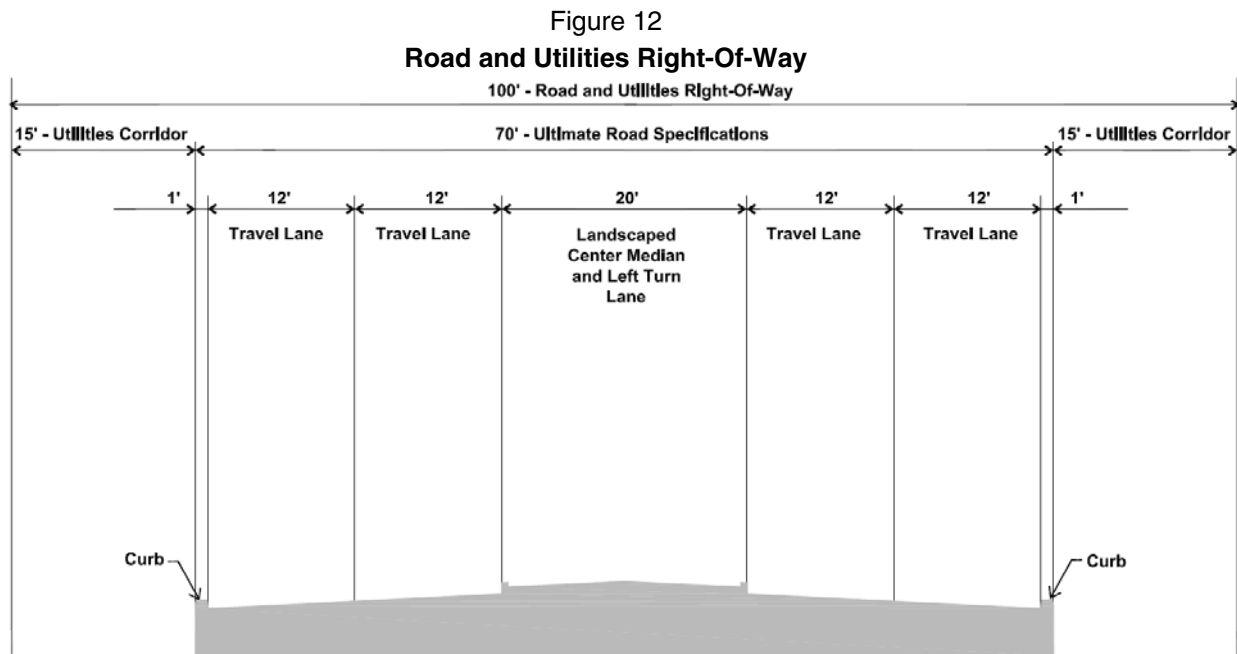
This chapter presents the recommended land use plan for the Development Area, including the development plans, phasing plan and capital improvement program. This plan provides the future development roadmap for the Development Area through the year 2050 and helps meet the vision of the Airport as presented in the goals and objectives in the Initial Strategic Assessment.

### A. Recommended Development Plan

#### *Road and Utilities Right-of-Ways*

A 100-foot right-of-way was reserved for all new roadways and associated utilities corridors, as shown in **Figure 12**. The right-of-way would be allocated as follows:

- A 70-foot wide corridor would be reserved for roadways: 12-foot wide lanes, two lanes in each direction, and an additional 20-foot wide center turn lane. The right-of-way also includes one-foot curbs.
- Two 15-foot wide corridors would be set aside for utilities on each side of the road.



#### Notes:

- Local codes will govern
- Slopes amplified for clarity
- Storm ditch not included

### **Site Access**

As illustrated in **Figure 13**, the primary access to the development area would be via 89th Street and 74th Street, both of which have existing interchanges with nearby Interstate 44. Additional access would be provided from the south by 104th Street and from the north, including the Airport Terminal area, by 59th Street. The site has 3 zones as shown in **Figure 14**.

### **Roadway Configuration**

**Road R1.** Road R1, shown in **Figure 15**, would be a five-lane avenue connecting 54<sup>th</sup> Street on the north end of the development area with 104<sup>th</sup> Street on the south end. R1 is the Portland Avenue relocation project that the City of Oklahoma City has been planning.

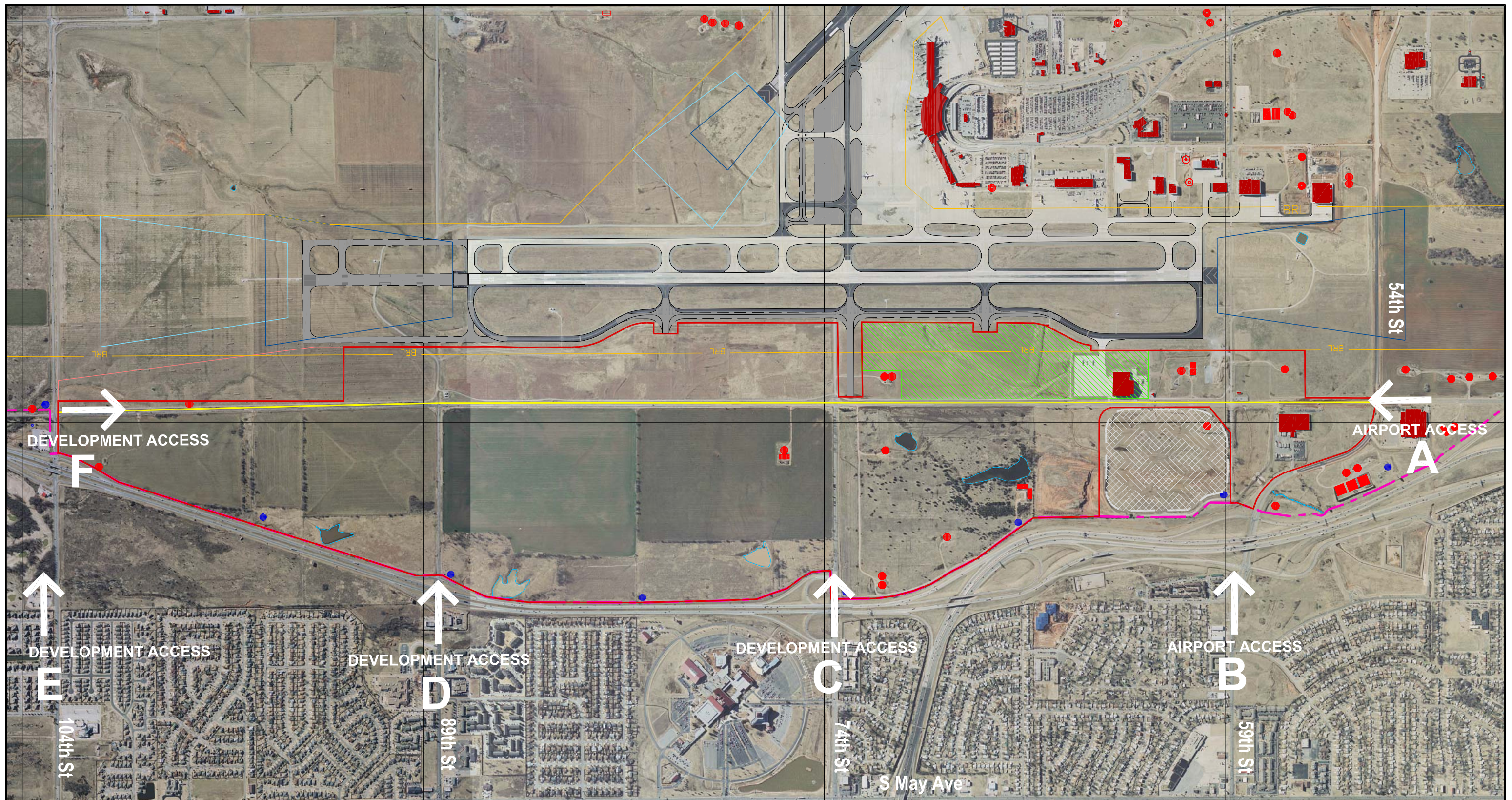
Road R1 would provide access to all non-aviation development parcels. The separation between Interstate Highway 44 and R1 would be sufficient to allow for the development of land between the two roadways. Developers would have the option of drawing attention to the highly attractive and visible side of highway frontage parcels and/or drawing attention to the side of those parcels fronting R1.

It is assumed that traffic control (signs or signals) would be utilized at the intersections of 1) R1 and 74<sup>th</sup> Street, and 2) R1 and 89<sup>th</sup> Street. At both intersections, Road R1 would be offset to the west to provide sufficient space, between the potentially signalized highway ramp intersections and the frontage road, for vehicles to queue at the intersections.

South of 89<sup>th</sup> Street, Road R1 is offset from the highway by a distance which would not be sufficient to allow development along the entire highway side segment of R1 between 89<sup>th</sup> Street and 104<sup>th</sup> Street. The southern end of R1 would be near the existing intersection with existing Portland Avenue and 104<sup>th</sup> Street.

**Road R2.** Road R2 would be a five-lane avenue connection between the existing 74<sup>th</sup> Street and the existing 89<sup>th</sup> Street which would be the main thoroughfare providing access to aviation development parcels. In this configuration, with Portland Avenue relocated to the east as a spine road, the separation between the highway and the avenue would be sufficient to develop parcels between the two roads. These parcels will be highly desirable for developments which feature drive through services, since the site can be accessed from either Road R1 and/or potentially Road R2.





# LEGEND

- |  |   |  |  |
|--|---|--|--|
|  | Existing airport property line            |  | Existing utilities corridor (See Figure 16 for additional details) |
|  | Development area                          |  | Leased land  |
|  | Land developable after airfield expansion |  | Water well   |
|  | Future airfield expansion                 |  | Oil well   |
|  | Existing Runway Protection Zone           |  | Stormwater detention pond  |
|  | Future Runway Protection Zone             |  |  |
|  | Building restriction line                 |  |  |

Source: Airport Layout Plan provided by Barnard Dunkelberg

**Figure 13**  
**REGIONAL ACCESS**

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September 2009

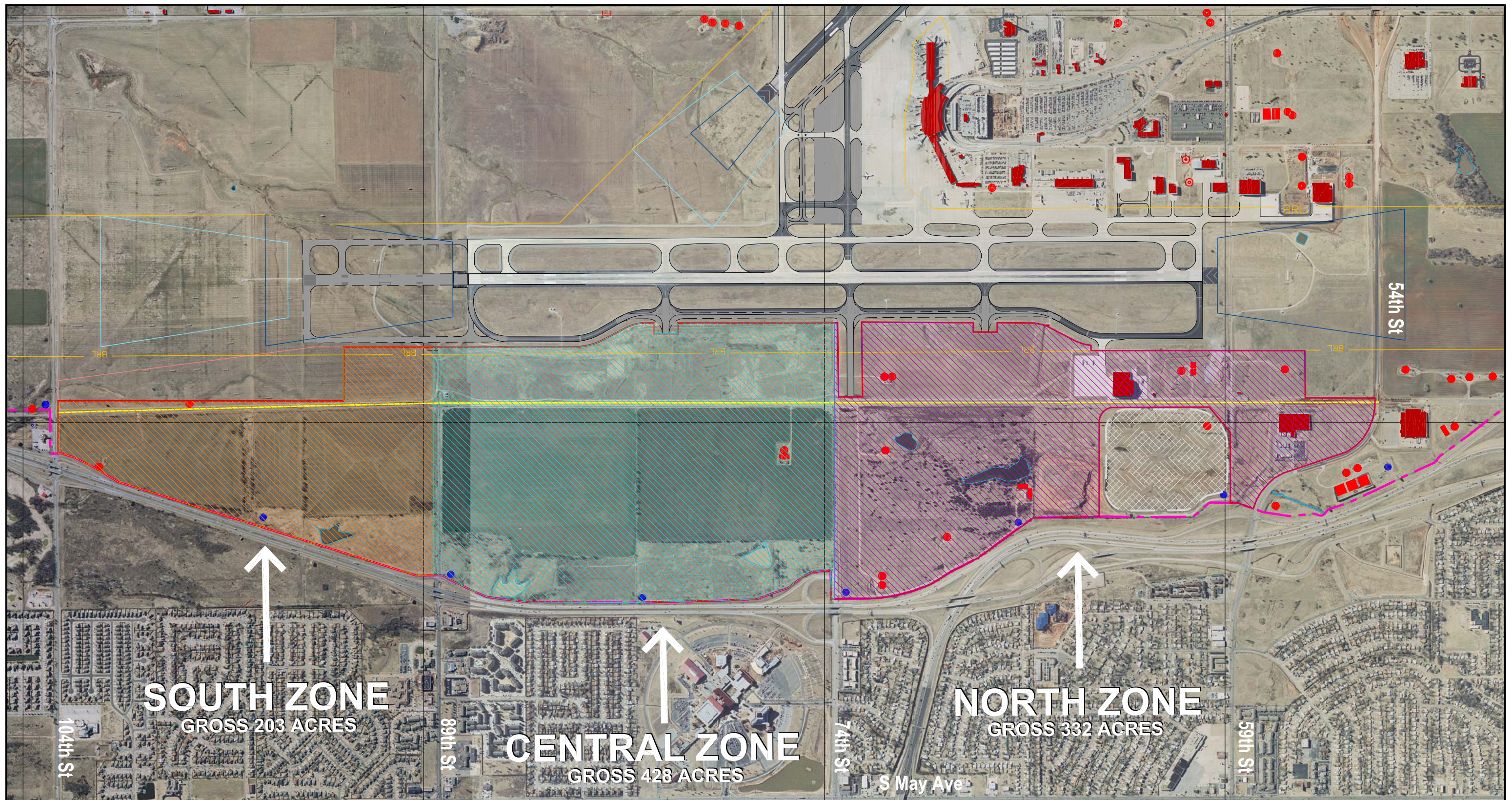
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**CONSULTANCY**  
*Airport Management Consulting*



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Scale: 1" = 1250'





#### LEGEND

- |  |   |  |  |
|--|---|--|--|
|  | Existing airport property line            |  | Existing utilities corridor (See Figure 16 for additional details) |
|  | Development area                          |  | Water well   |
|  | Land developable after airfield expansion |  | Oil well   |
|  | Future airfield expansion                 |  | Stormwater detention pond  |
|  | Existing Runway Protection Zone           |  |  |
|  | Future Runway Protection Zone             |  |  |
|  | Building restriction line                 |  |  |

#### DEVELOPMENT ZONES

- |  |              |
|--|--------------|
|  | North zone   |
|  | Central zone |
|  | South zone   |

Source: Airport Layout Plan provided by Barnard Dunkelberg



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Scale: 1" = 1250'

**Figure 14**  
**DEVELOPMENT AREA SUBDIVISIONS**

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### ***Development Phasing***

The study timeframe is 40 years, broken down in four 10-year long phases. It was assumed that implementation of the project will start in 2010. All the infrastructure improvements recommended in the Land Use Plan will be built in Phase 1, from 2010 to 2019, and Phase 2, from 2020 to 2029. The Airport Trust intends to frontload the project in order to make the site “development-ready”, to increase the attractiveness of the Development Area to potential tenants and maximize flexibility in accommodating prospective developers.

- ***Phase 1 (2010-2019):*** Initial development should focus on the north zone, shown in Figure 14, to capitalize on the presence of existing utilities and tenants. Projects for this phase include the construction of Road R1 and the partial construction of R2, located west of Road R1 between 74th and 89th Streets. Additional roadway projects include improvements to 74th Street and 89<sup>th</sup> Street between I-44 and Road R1, and construction of R5, which would provide access to parcels located along Taxiway H. A utilities corridor would be constructed along Roads R1, R2 and R5. This corridor would include water, gas, electric, telephone, fiber optic and sewer lines. The new utilities corridor would be connected to existing utilities at 59th street or via a connection to the corridor along Portland Avenue at 74th Street. Phase 1 projects also include the extension of Taxiway G east across Portland Avenue to provide airfield access to parcels 4-N and 5-N.
- ***Phase 2 (2020-2029):*** This phase includes the construction of the remaining segment of Road R2 and the associated utilities corridor. Taxiway H2 would potentially be extended across Portland Avenue to provide airfield access to parcels 4-C and 6-C if the tenants for these parcels required airfield access; and Road R6 would be built to provide landside access to parcel 5-C.
- ***Phase 3 (21-30 years):*** No projects are anticipated in phase 3.
- ***Phase 4 (2040-2049):*** No projects are anticipated in phase 4.

The project phasing is illustrated in **Figure 15**.

### ***Existing Utilities***

Significant utility infrastructure is located within the Development Area, with a main corridor of utilities located along existing Portland Avenue. The option of relocating all the utilities along Road R1 was deemed not economically feasible and it was therefore decided to keep the existing utilities corridor in its current location. This corridor runs through the parcels 7-C, 8-C, 1-S and 4-S.

### ***Future Utilities***

Utilities corridors will be built along Roads R1 and R2 to provide utilities to the Development Area. **Figure 16** shows the recommended utilities infrastructure and phasing.

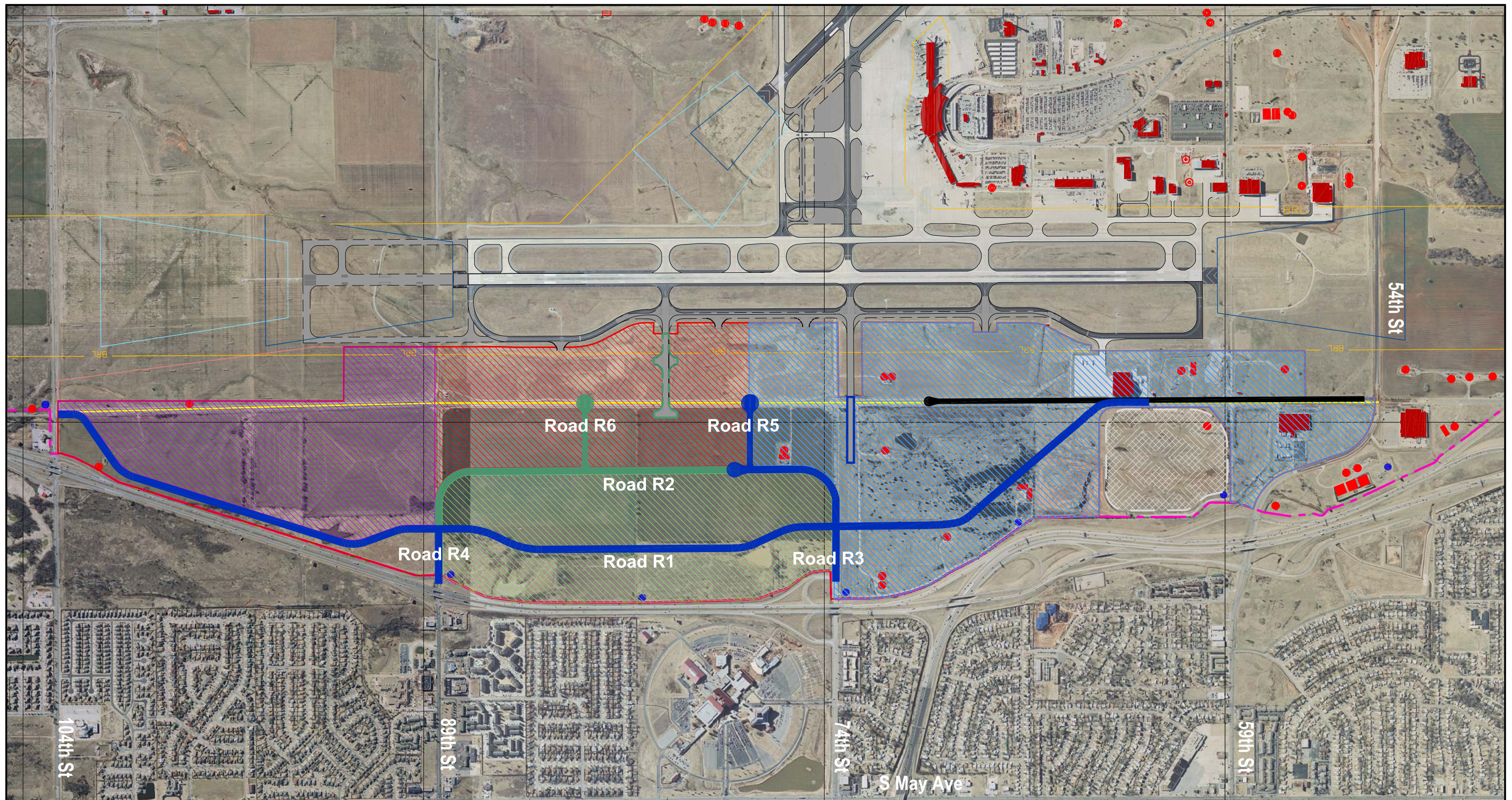
### ***Land Uses***

**Figure 17** shows the areas that would be reserved for aviation and commercial land uses. Approximately 70% of the development area is set aside for aviation development, the remainder being designated for commercial development. The plan is further detailed in **Figure 18**. The site was configured with 7 parcels in the north zones, 25 in the central zone and 4 in the south zone. The parcels were designated for specific land uses as follows:

- 346 acres of parcels best suited for aviation-related use with taxiway access
- 174 acres of parcels for aviation use without taxiway access
- 112 acres for commercial development
- 100 acres for strategic land reserve

It is recommended that all parcels with taxiway frontage be exclusively used for aviation activities that require airfield access as this is clearly the highest and best use for these parcels. The plan illustrates the best strategy for the development area, with commercial development along the highway to maximize the visibility of the site. However, the layout is conceptual and parcel sizes can be adjusted to meet the demands and requirements of specific tenants.





#### LEGEND

- |  |   |  |  |
|--|---|--|--|
|  | Existing airport property line            |  | Existing utilities corridor (See Figure 16 for additional details) |
|  | Development area                          |  | Stormwater detention pond  |
|  | Land developable after airfield expansion |  | Water well   |
|  | Future airfield expansion                 |  | Oil well   |
|  | Existing Runway Protection Zone           |  | Existing road to remain  |
|  | Future Runway Protection Zone             |  |  |
|  | Building restriction line                 |  |  |

#### DEVELOPMENT PHASING

- |  |   |
|--|---|
|  | Phase 1 (0-10 years)                    |
|  | Phase 2 (11-20 years)                   |
|  | Phase 3 (21-30 years)                   |
|  | Phase 4 (31-40 years)                   |
|  | Phase 1 road and utilities right-of-way |
|  | Phase 2 road and utilities right-of-way |
|  | Phase 2 potential taxiway               |



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Scale: 1" = 1250'

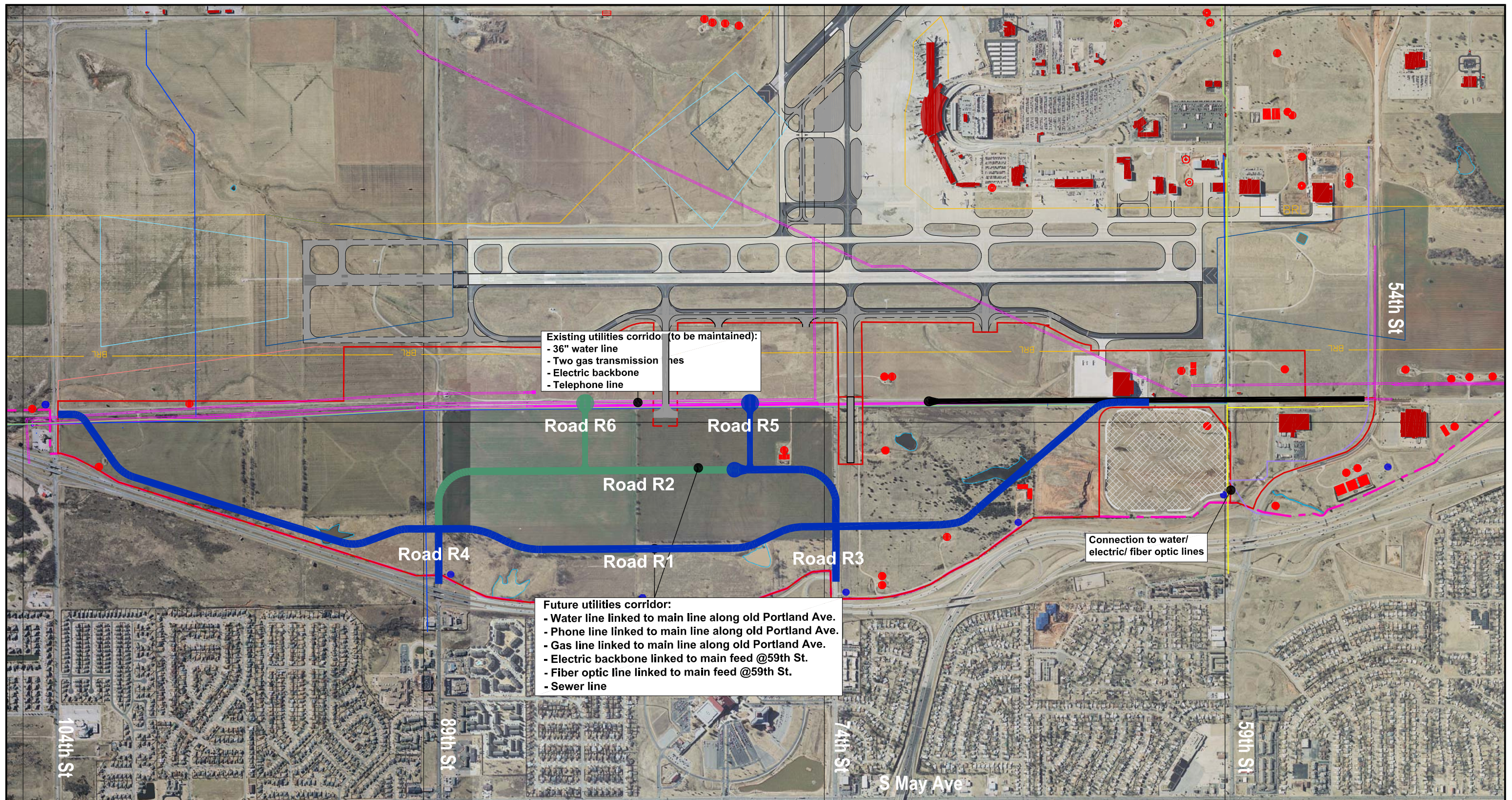
Source: Airport Layout Plan provided by Barnard Dunkelberg

**Figure 15**  
**SITE DEVELOPMENT PHASING**

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Oklahoma City Will Rogers World Airport  
September 2009

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#### LEGEND

- Existing airport property line
- Development area
- Land developable after airfield expansion
- Future airfield expansion
- Existing Runway Protection Zone
- Future Runway Protection Zone
- Building restriction line

- Stormwater detention pond
- Water well
- Oil well
- Existing road to remain

#### EXISTING UTILITIES

- Water
- Telephone
- Natural Gas
- Fiber optic
- Electric

#### UTILITIES PHASING

- Phase 1 utilities corridor
- Phase 2 utilities corridor



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Scale: 1" = 1250'

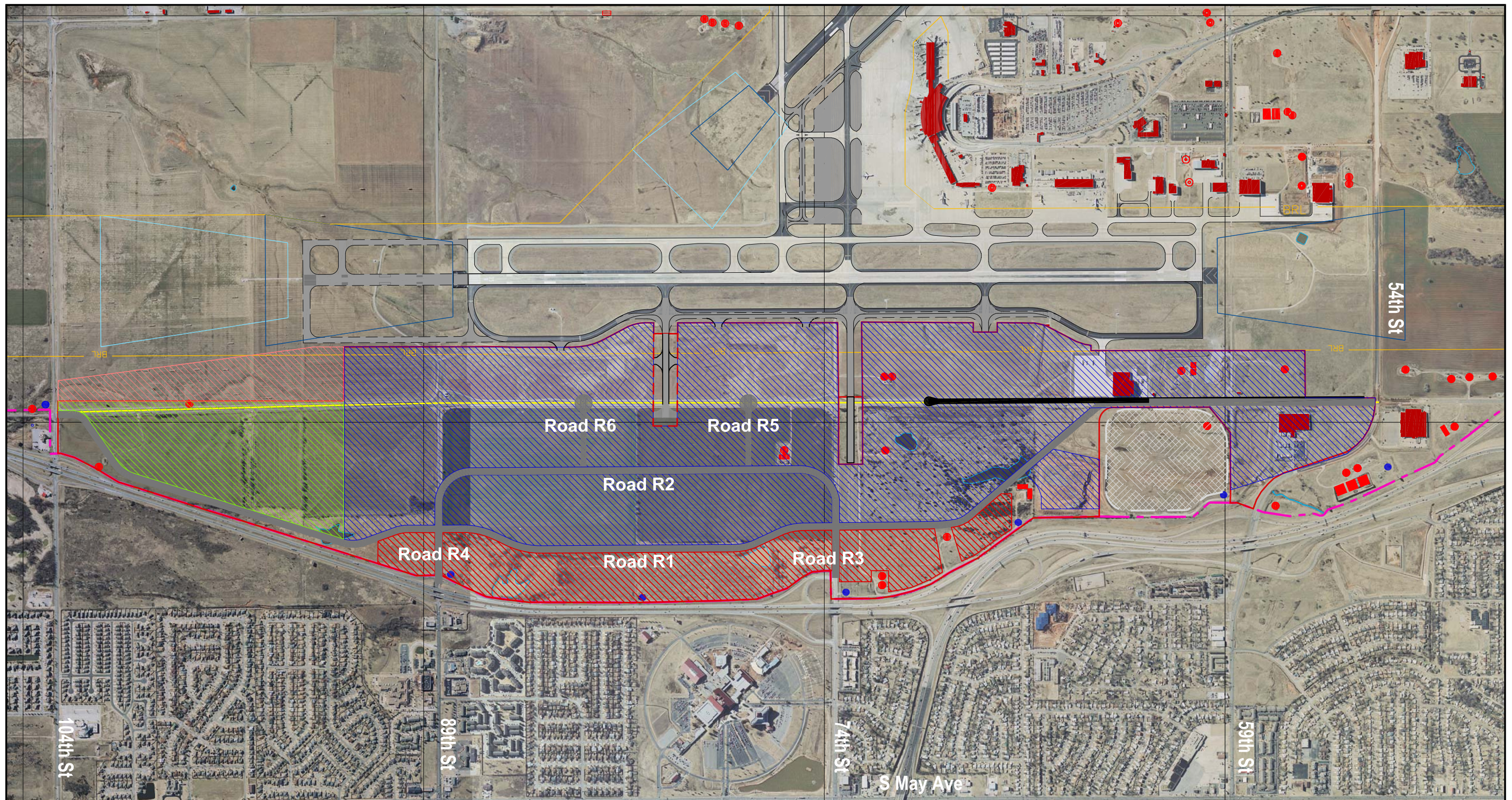
Source: Airport Layout Plan provided by Barnard Dunkelberg

**Figure 16**  
**UTILITIES PHASING**

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Oklahoma City Will Rogers World Airport  
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#### LEGEND

- Existing airport property line
- Development area
- Land developable after airfield expansion
- Future airfield expansion
- Existing Runway Protection Zone
- Future Runway Protection Zone
- Building restriction line
- Existing utilities corridor (See Figure 16 for additional details)
- Stormwater detention pond
- Water well
- Oil well
- Existing road to remain
- Proposed road and utilities right-of-way

#### LAND USES

- Aviation use
- Nonaeronautical use
- Strategic land reserve
- Land available for aviation-related development after airfield expansion

Note: Assumes a 100-ft right-of-way for the proposed roads and associated utilities corridors



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Scale: 1" = 1250'

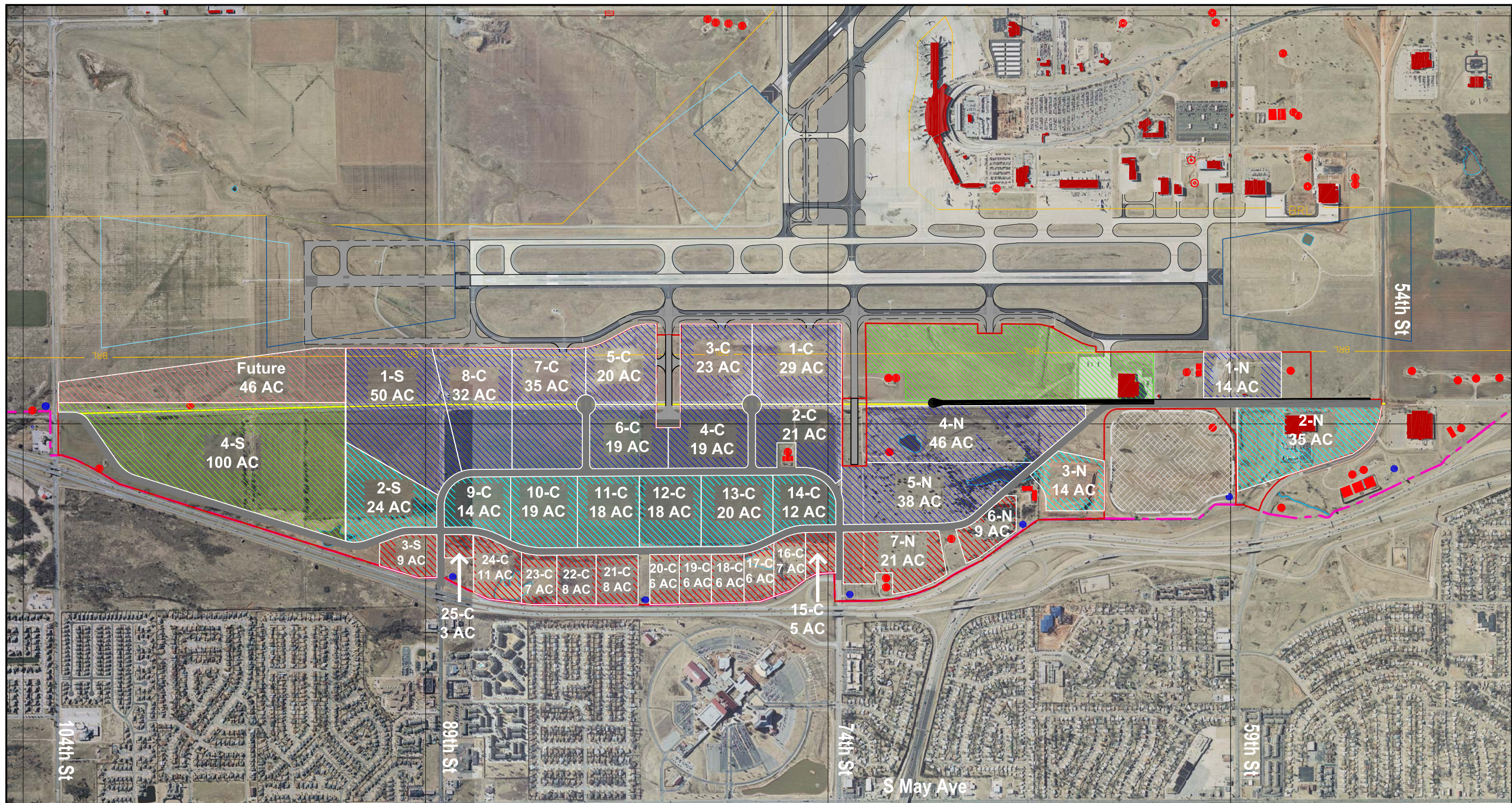
Figure 17  
AVIATION VS. NON-AVIATION LAND USES

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Oklahoma City Will Rogers World Airport  
September 2009

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Source: Airport Layout Plan provided by Barnard Dunkelberg





#### LEGEND

- |  |   |  |  |
|--|---|--|--|
|  | Existing airport property line            |  | Existing utilities corridor              |
|  | Development area                          |  | Stormwater detention pond                |
|  | Land developable after airfield expansion |  | Water well                               |
|  | Future airfield expansion                 |  | Oil well                                 |
|  | Existing Runway Protection Zone           |  | Existing road to remain                  |
|  | Future Runway Protection Zone             |  | Proposed road and utilities right-of-way |
|  | Building restriction line                 |  | Planned taxiway extension                |
|  |   |  | Potential taxiway extension              |
- Source: Airport Layout Plan provided by  
Barnard Dunkelberg

#### LAND USES

- |  |   |
|--|---|
|  | Direct Aviation and Direct Aviation Support — w/ airfield access (346 acres)        |
|  | Direct Aviation Support and Indirect Aviation — w/o airfield access (174 acres)     |
|  | Nonaeronautical (112 acres)   |
|  | Strategic land reserve (100 acres)  |
|  | Land available for aviation-related development after airfield expansion (46 acres) |

Note: Assumes a 100-ft right-of-way for the proposed roads and associated utilities corridors



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Scale: 1" = 1250'

Figure 18  
SITE PARCELIZATION - ULTIMATE DEVELOPMENT

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## B. Infrastructure Cost Estimates

The program cost estimate has been prepared for the purpose of establishing a probable cost of development for the major infrastructure improvements recommended by the Land Use Plan. These costs are based on master plan level of analysis and represent order-of-magnitude estimates. Engineering and architectural designs should be prepared to determine specific project scopes and development costs.

**Table 14** shows the recommended program cost summary by development phase. Recommended projects were organized in two 10-year long phases, from 2010 to 2029. Because demand for aviation and commercial development may not materialize as predicted, or other conditions might change, the phasing of the projects should be viewed as “estimated,” subject to refinement as the parcels actually get developed and necessary infrastructure is put in place.

As shown in Table 14, soft costs were included with the individual project costs. Cost factors have been added for general conditions (10%), bonds, overhead and profit (12%), estimator’s contingency (10%) and engineering contingency (15%). The relatively high contingency amounts account for the preliminary planning nature of the projects and the lack of specific design information. The project costs have been escalated to the projected mid-point of construction for each phase at a rate of 3% per year to account for inflation. The 2009 construction costs rise from approximately \$22.9 million to \$44.7 million with the addition of the soft cost factors and escalation. This amount does not include the construction cost of the potential phase 2 project, Taxiway H2 extension, which would represent an additional \$9 million in escalated dollars.

The estimate anticipates that all work would be publicly advertised and bid. The general and specialized contractors were assumed to make all inclusive bids for the work scope of each project.

Capital cost estimates were based on unit costs developed based on the experience of contractors, construction material suppliers, and work performed at airports of similar size. Unit costs, as well as detailed cost estimates, are presented in Attachment I.

Project costs (in 2009 Current dollars) for Phase 1 and Phase 2 which are the funding responsibility of the Oklahoma City Airport Trust total \$11,228,571.

Table 14

**CAPITAL COST SUMMARY**  
Will Rogers World Airport Strategic Development Program

|  |                             | <b>Total<br/>Direct Cost<br/>(in 2009<br/>Current<br/>dollars)</b> | <b>Total<br/>Project Cost<br/>(in 2009<br/>Current<br/>dollars)</b> | <b>Total<br/>Project<br/>Cost (in<br/>Escalated<br/>Dollars)</b> |
|--|-----------------------------|--|---|--|
| <b>Phase 1 (2010-2019) - Planned Projects</b>  |                             |  |   |  |
| Taxiway G Extension  |                             | 1,740,395  | 2,680,208   | 3,200,309  |
| Federal Share (75% project cost)   | Airport Improvement Program | 1,305,296  | 2,010,156   | 2,400,232  |
| Local Share (25% project cost)   | Oklahoma City Airport Trust | 435,099  | 670,052   | 800,077  |
| Road R1 - Relocated Portland Avenue  | City of Oklahoma City       | 8,499,069  | 13,088,566  | 15,628,433   |
| Road R2 - Horseshoe Road - Phase 1   | Oklahoma City Airport Trust | 956,718  | 1,473,346   | 1,759,252  |
| Road R3 - Improvements to 74th Street  | Oklahoma City Airport Trust | 357,260  | 550,180   | 656,944  |
| Road R4 - Improvements to 89th Street  | Oklahoma City Airport Trust | 353,261  | 544,021   | 649,590  |
| Road R5 - Access to Parcels 1C & 4C  | Oklahoma City Airport Trust | 500,864  | 771,330   | 921,009  |
| Utilities – R1/R2/R5 Right-Of-Way  |                             |  |   |  |
| Water Supply   | City of Oklahoma City       | 1,031,467  | 1,588,459   | 1,896,703  |
| Sanitary Sewer   | Oklahoma City Airport Trust | 1,304,404  | 2,008,782   | 2,398,591  |
| Storm Sewer  | Oklahoma City Airport Trust | 580,000  | 893,200   | 1,066,528  |
| Fuel Distribution  | Oklahoma Natural Gas        | 258,970  | 398,814   | 476,205  |
| Electrical Supply  | Oklahoma Gas and Electric   | 1,350,000  | 2,079,000   | 2,482,435  |
| Telephone  | AT&T                        | 647,800  | 997,612   | 1,191,201  |
| Fiber Optic  | Cox Communications          | 1,285,600  | 1,979,824   | 2,364,013  |
| <b>Total Phase 1 - Planned Projects</b>  |                             | <b>\$18,865,807</b>  | <b>\$29,053,343</b>   | <b>\$34,691,211</b>  |
| <b>Phase 2 (2020-2029) - Planned Projects</b>  |                             |  |   |  |
| Road R2 - Horseshoe Road - Phase 2   | Oklahoma City Airport Trust | 1,986,431  | 3,059,104   | 4,908,963  |
| Road R6 - Access to Parcels 5C & 8C  | Oklahoma City Airport Trust | 507,164  | 781,033   | 1,253,329  |
| Utilities – R2/R6 Right-Of-Way   |                             |  |   |  |
| Water Supply   | City of Oklahoma City       | 248,095  | 382,066   | 613,104  |
| Sanitary Sewer   | Oklahoma City Airport Trust | 170,080  | 261,923   | 420,310  |
| Storm Sewer  | Oklahoma City Airport Trust | 140,000  | 215,600   | 345,975  |
| Fuel Distribution  | Oklahoma Natural Gas        | 75,189   | 115,791   | 185,810  |
| Electrical Supply  | Oklahoma Gas and Electric   | 450,000  | 693,000   | 1,112,062  |
| Telephone  | AT&T                        | 168,200  | 259,028   | 415,664  |
| Fiber Optic  | Cox Communications          | 326,400  | 502,656   | 806,615  |
| <b>Total Phase 2 - Planned Projects</b>  |                             | <b>\$4,071,559</b>   | <b>\$6,270,201</b>  | <b>\$10,061,831</b>  |
| <b>TOTAL PLANNED PROJECTS</b>  |                             | <b>\$22,937,366</b>  | <b>\$35,323,544</b>   | <b>\$44,753,042</b>  |
| <b>Phase 2 (2020-2029) - Potential Projects</b>  |                             |  |   |  |
| Taxiway H2 Extension   | TBD                         | 3,649,818  | 5,620,719   | 9,019,604  |
| Total Direct Cost: Actual project costs  |                             |  |   |  |
| Total Project Cost: Actual project costs with the addition of soft costs and contingency         |                             |  |   |  |
| Total Project Cost (in Escalated Dollars): Escalated to mid-point of construction for each phase |                             |  |   |  |

Source: Jacobs Consultancy.

**Table 15** summarizes the project costs by entity/company responsible for financing specific infrastructure projects related to the development of the project site.

| Table 15  |                            |                                |                     |
|---|----------------------------|--------------------------------|---------------------|
| <b>CAPITAL COST SUMMARY BY FUNDING ENTITY</b>           |                            |                                |                     |
| Will Rogers World Airport Strategic Development Program |                            |                                |                     |
| <b>TOTAL PROJECT COST (IN 2009 CURRENT DOLLARS)</b>     |                            |                                |                     |
| <b>Funding Responsibility</b>                           | <b>Phase 1 (2010-2019)</b> | <b>Phase 2 (2020-2029) (a)</b> | <b>Total</b>        |
| City of Oklahoma City                                   | \$14,677,025               | \$382,066                      | \$15,059,091        |
| Airport Improvement Program                             | \$2,010,156                | \$0                            | \$2,010,156         |
| Oklahoma City Airport Trust                             | \$6,910,911                | \$4,317,660                    | \$11,228,571        |
| Oklahoma Natural Gas                                    | \$398,814                  | \$115,791                      | \$514,605           |
| Oklahoma Gas and Electric                               | \$2,079,000                | \$693,000                      | \$2,772,000         |
| AT&T  | \$997,612                  | \$259,028                      | \$1,256,640         |
| Cox Communications                                      | \$1,979,824                | \$502,656                      | \$2,482,480         |
| <b>Total</b>  | <b>\$29,053,343</b>        | <b>\$6,270,201</b>             | <b>\$35,323,544</b> |
| <b>TOTAL PROJECT COST (IN ESCALATED DOLLARS)</b>        |                            |                                |                     |
| <b>Funding Responsibility</b>                           | <b>Phase 1 (2010-2019)</b> | <b>Phase 2 (2020-2029) (a)</b> | <b>Total</b>        |
| City of Oklahoma City                                   | \$17,525,135               | \$613,104                      | \$18,138,239        |
| Airport Improvement Program                             | \$2,400,232                | \$0                            | \$2,400,232         |
| Oklahoma City Airport Trust                             | \$8,251,990                | \$6,928,576                    | \$15,180,566        |
| Oklahoma Natural Gas                                    | \$476,205                  | \$185,810                      | \$662,016           |
| Oklahoma Gas and Electric                               | \$2,482,435                | \$1,112,062                    | \$3,594,496         |
| AT&T  | \$1,191,201                | \$415,664                      | \$1,606,865         |
| Cox Communications                                      | \$2,364,013                | \$806,615                      | \$3,170,629         |
| <b>Total</b>  | <b>\$34,691,211</b>        | <b>\$10,061,831</b>            | <b>\$44,753,042</b> |
| (a) Only includes planned projects.                     |                            |                                |                     |
| Source: Jacobs Consultancy.                             |                            |                                |                     |

Tables 16 to 18 detail the total project cost estimates (in escalated dollars) by development phase. Construction costs for Phase 1, spanning from 2010 to 2019, were estimated at \$18.9 million in current 2009 dollars, which corresponds to \$34.7 million with the addition of soft costs and escalation. It is to be noted that costs are roughly proportional to the length of the roadways and utilities corridor being built, which explains the high cost of this phase compared to the subsequent phases as Portland Avenue would be entirely relocated in Phase 1. The cost of the utility infrastructure is also driven up by the need to connect the new utilities corridor to the existing utilities and by the need to build new infrastructure, such as the sanitary sewer lift station, that will be used for the entire site.

Table 16

**DEVELOPMENT COSTS FOR RECOMMENDED PLAN  
PHASE 1 (2010-2019)**  
Will Rogers World Airport Strategic Development Program

| <b>Phase 1 Projects - Planned Projects</b> | <b>Total Project Cost (in Escalated Dollars)</b> |
|--|--|
| <b>Taxiway G Extension - Federal Share</b> | <b>\$2,400,232</b>                               |
| Site preparation                           |  |
| Site clearing                              | 17,074   |
| Earthwork                                  | 290,444  |
| Site improvements                          |  |
| Taxiway pavement                           | 1,469,549  |
| Landscaping                                | 42,075   |
| Civil and mechanical utilities             |  |
| Storm sewer                                | 482,696  |
| Electrical utilities                       |  |
| Taxiway lighting                           | 98,396   |
| <b>Taxiway G Extension - Local Share</b>   | <b>\$800,077</b>                                 |
| Site preparation                           |  |
| Site clearing                              | 5,691  |
| Earthwork                                  | 96,815   |
| Site improvements                          |  |
| Taxiway pavement                           | 489,850  |
| Landscaping                                | 14,025   |
| Civil and mechanical utilities             |  |
| Storm sewer                                | 160,899  |
| Electrical utilities                       |  |
| Taxiway lighting                           | 32,799   |
| <b>Road R1 - Relocated Portland Avenue</b> | <b>\$15,628,433</b>                              |
| Site preparation                           |  |
| Site clearing                              | 130,102  |
| Site demolition and relocation             | 1,136,403  |
| Earthwork                                  | 1,375,544  |
| Site improvements                          |  |
| Road                                       | 12,479,385                                       |
| Landscaping                                | 400,162  |
| Electrical utilities                       |  |
| Site lighting                              | 106,837  |
| <b>Road R2 - Horseshoe Road - Phase 1</b>  | <b>\$1,759,252</b>                               |
| Site preparation                           |  |
| Site clearing                              | 14,049   |
| Earthwork                                  | 145,166  |
| Site improvements                          |  |
| Road                                       | 1,566,090  |
| Landscaping                                | 33,947   |

Table 16 (page 2 of 3)

**DEVELOPMENT COSTS FOR RECOMMENDED PLAN  
PHASE 1 (2010-2019)**

Will Rogers World Airport Strategic Development Program

|   |                     |
|---|---------------------|
| <b><u>Road R3 - Improvements to 74th Street</u></b>   | <b>\$656,944</b>    |
| Site preparation                                      |                     |
| Site clearing   | 4,722               |
| Site demolition and relocation                        | 4,967               |
| Earthwork   | 55,038              |
| Site improvements                                     |                     |
| Road  | 578,234             |
| Landscaping   | 13,983              |
| <b><u>Road R4 - Improvements to 89th Street</u></b>   | <b>\$649,590</b>    |
| Site preparation                                      |                     |
| Site clearing   | 4,737               |
| Site demolition and relocation                        | 5,007               |
| Earthwork   | 55,032              |
| Site improvements                                     |                     |
| Road  | 571,529             |
| Landscaping   | 13,286              |
| <b><u>Road R5 - Access to Parcels 1C &amp; 4C</u></b> | <b>\$921,009</b>    |
| Site preparation                                      |                     |
| Site clearing   | 9,937               |
| Earthwork   | 102,116             |
| Site improvements                                     |                     |
| Road  | 764,354             |
| Landscaping   | 44,601              |
| <b><u>Utilities – R1 Right-Of-Way</u></b>             | <b>\$10,249,223</b> |
| Water Supply  | 1,650,243           |
| Sanitary Sewer  | 2,229,169           |
| Storm Sewer   | 919,420             |
| Fuel Distribution                                     | 393,579             |
| Electrical Supply                                     | 2,022,725           |
| Telephone   | 1,011,362           |
| Fiber Optic   | 2,022,725           |
| <b><u>Utilities – R2 Right-Of-Way - Phase 1</u></b>   | <b>\$981,256</b>    |
| Water Supply  | 174,482             |
| Sanitary Sewer  | 105,208             |
| Storm Sewer   | 82,748              |
| Fuel Distribution                                     | 51,720              |
| Electrical Supply                                     | 275,826             |
| Telephone   | 97,091              |
| Fiber Optic   | 194,182             |

Table 16 (page 3 of 3)

**DEVELOPMENT COSTS FOR RECOMMENDED PLAN  
PHASE 1 (2010-2019)**

Will Rogers World Airport Strategic Development Program

|   |                     |
|---|---------------------|
| <b>Utilities – R5 Right-Of-Way</b>      | <b>\$645,196</b>    |
| Water Supply                            | 71,977              |
| Sanitary Sewer                          | 64,213              |
| Storm Sewer                             | 64,359              |
| Fuel Distribution                       | 30,907              |
| Electrical Supply                       | 183,884             |
| Telephone                               | 82,748              |
| Fiber Optic                             | 147,107             |
| <b>Total Phase 1 - Planned Projects</b> | <b>\$34,691,211</b> |

Source: Jacobs Consultancy.

Construction costs for Phase 2 (2020-2029) were estimated at \$7 million in current 2009 dollars, which corresponds to \$10.1 million with the addition of soft costs and escalation.



Table 17

**DEVELOPMENT COSTS FOR RECOMMENDED PLAN  
PLANNED PROJECTS  
PHASE 2 (2020-2029)**

Will Rogers World Airport Strategic Development Program

| Phase 2 Projects - Planned Projects            | Total Project Cost (in<br>Escalated Dollars) |
|--|--|
| <b>Road R2 - Horseshoe Road - Phase 2</b>      | <b>\$4,908,963</b>                           |
| Site preparation                               |  |
| Site clearing                                  | 49,969                                       |
| Earthwork                                      | 512,583                                      |
| Site improvements                              |  |
| Road   | 4,244,210                                    |
| Landscaping                                    | 102,202                                      |
| <b>Road R6 - Access to Parcels 5C &amp; 8C</b> | <b>\$1,253,329</b>                           |
| Site preparation                               |  |
| Site clearing                                  | 13,740                                       |
| Earthwork                                      | 140,458                                      |
| Site improvements                              |  |
| Road   | 1,038,227                                    |
| Landscaping                                    | 60,904                                       |
| <b>Utilities – R2 Right-Of-Way - Phase 2</b>   | <b>\$3,032,450</b>                           |
| Water Supply                                   | 516,372                                      |
| Sanitary Sewer                                 | 334,012                                      |
| Storm Sewer                                    | 259,481                                      |
| Fuel Distribution                              | 144,274                                      |
| Electrical Supply                              | 864,937                                      |
| Telephone                                      | 304,458                                      |
| Fiber Optic                                    | 608,915                                      |
| <b>Utilities – R2/R6 Right-Of-Way</b>          | <b>\$867,090</b>                             |
| Water Supply                                   | 96,732                                       |
| Sanitary Sewer                                 | 86,297                                       |
| Storm Sewer                                    | 86,494                                       |
| Fuel Distribution                              | 41,536                                       |
| Electrical Supply                              | 247,125                                      |
| Telephone                                      | 111,206                                      |
| Fiber Optic                                    | 197,700                                      |
| <b>Total Phase 2 - Planned Projects</b>        | <b>\$10,061,831</b>                          |

Source: Jacobs Consultancy.

Construction costs for Phase 2 potential projects (2020-2029) were estimated at \$3.6 million in current 2009 dollars, which corresponds to \$9 million with the addition of soft costs and escalation.

Table 18

**DEVELOPMENT COSTS FOR RECOMMENDED PLAN  
POTENTIAL PROJECTS  
PHASE 2 (2020-2029)**

Will Rogers World Airport Strategic Development Program

| Phase 2 Projects - Potential Projects | Total Project Cost (in<br>Escalated Dollars) |
|---------------------------------------|--|
| <b>Taxiway H2 Extension</b>           | <b>\$9,019,604</b>                           |
| Site preparation                      |  |
| Site clearing                         | 39,965                                       |
| Earthwork                             | 673,124                                      |
| Site improvements                     |  |
| Taxiway pavement                      | 5,531,517                                    |
| Landscaping                           | 68,743                                       |
| Civil and mechanical utilities        |  |
| Storm sewer                           | 2,471,248                                    |
| Electrical utilities                  |  |
| Taxiway lighting                      | 235,007                                      |

Source: Jacobs Consultancy.

### C. Development Standards

Development Standards typically convey the standards/criteria and policies/procedures for the development of aviation and non-aviation land and/or improvements at an airport. In addition to outlining the process for developing tenant facilities (both commercial and non-commercial) at an airport, development standards provide the parameters governing the design, construction, and/or modification of such facilities. The purpose of development standards is to promote consistent, attractive, and compatible high quality development at an airport. Development standards typically apply to any person or entity who desires to construct and/or modify improvements and/or facilities at an airport.

The standards establish criteria to support the planning, design, construction, and maintenance of improvements at the Airport. These criteria include:

- Right of Ways
- Building and Parking Setbacks
- Building Design and Materials
- Parking and Driveways

- Lighting
- Signage
- Maintenance

These guidelines are issued to Airport tenants to govern the development of tenant improvements. In general, the standards are intended to address aviation, light industrial, warehousing, air cargo, and office facilities at the Airport.

The process for review entails submitting documentation of proposed Tenant Improvements to Airport management who, in turn, reviews and forwards referral comments and supporting documentation to the Oklahoma City Development Center for formal review and approval.

The Airport's design guidelines are intended to articulate specific Airport requirements that are not addressed in the City's Building Code or other governing Codes or Covenants.