KANSAS CITY
Aviation

Airport Master Plan

KANSAS CITY DOWNTOWN AIRPORT – WHEELER FIELD

Appendix G

Hangar Technical Memo

Appendix G
26-ACRE PARCEL DEVELOPMENT ASSESSMENT

The master plan project team included Aeroplex Group Partners as a subconsultant to provide consulting services and assessment of the undeveloped 26-acre parcel along Taxiway L. Their scope of services included providing expert input on the landside development alternatives for this parcel and performing a return-on-investment (ROI) analysis of the hangar and apron layout included in the preferred development plan (see Exhibit 5A). Below is their report which concludes that the full buildout for the 26-acre parcel is estimated to cost $95 million. The ROI for the development would be dependent on the rate charged on a per-square-foot basis.

September 3, 2024

RE: TAXIWAY LIMA DEVELOPMENT FINANCIAL ANALYSIS

Aeroplex Group Partners (AGP) was contracted by Coffman Associates to perform a return-on-investment analysis of various scenarios for the Taxiway Lima Development site at Midtown Kansas City (MKC) Airport. AGP evaluated an unlevered (cash) and levered (financed) internal rate of return (IRR) on the projected $93.3 million (M) project to develop 723,321 square feet (sq ft) of ground, 247,400 sq ft of hangar, and 21,000 sq ft of office space over term spanning 20 - 50 years. The analysis tested ground lease rates varying from $1.00 to $3.50 / sq ft annually and hangar/office rent rates of $12.00 to $42.00 / sq ft annually.

Private development projects typically seek a minimum IRR of 8% and upwards to 12-15% are common in certain markets. The minimum conditions were met in this analysis under a levered scenario with hangar rent of $30.00 / sq ft annually and 100% occupancy at a 25-year term with $1.00 / sq ft annual ground lease. In an effort to address any shortfall in revenue rates being competitive, MKC could further incentive private investment by using federal funding for the estimated $13.8 M in site development expenses to make the site pad ready for private development. This would allow private investment to achieve the minimum IRR under a levered scenario at hangar rents of $24.00 / sq ft annually at a 45-year term.

However, AGP's understanding of current market rates at MKC found hangar and office rent below $1.00 / sq ft with occupancy rates just over 50%. While not validated, these market conditions, would require a $0 ground lease and total project costs between $22 - $23 M to achieve the minimum IRR. This is unlikely given the cost of construction to achieve the project square footage areas studied. Assuming 75% occupancy and site development costs covered by the Airport, the minimum IRR under a levered scenario would require hangar rents of $30.00 / sq ft annually at a 35-year term (Figure 1) with $1.00 / sq ft annual ground lease generating revenue to the Airport displayed in the first row of Figure 2.

Levered IRR	20 Years	25 Years	30 Years	35 Years	40 Years	45 Years	50 Years
$12.00	-13%	-8%	-5%	-3%	-2%	-1%	0%
$18.00	-6%	-2%	-1%	1%	2%	3%	3%
$24.00	-2%	2%	3%	5%	5%	6%	6%
$30.00	2%	5%	6%	**8%**	**8%**	**9%**	**9%**
$36.00	5%	**8%**	**9%**	**10%**	**11%**	**12%**	**12%**
$42.00	**8%**	**11%**	**12%**	**13%**	**14%**	**15%**	**15%**

Figure 1. Levered Internal Rate of Return (IRR) for Hangar Rent of $12.00 - $42.00 / sq ft annually at $1.00 / sq ft ground lease.

Ground $ to MKC	20	25	30	35	40	45	50
$1.00	**18.5 M**	**24.7 M**	**31.8 M**	**39.7 M**	**48.8 M**	**59.0 M**	**70.5 M**
$1.50	27.7 M	37.1 M	47.6 M	59.6 M	73.1 M	88.4 M	105.8 M
$2.00	37.0 M	49.4 M	63.5 M	79.5 M	97.5 M	117.9 M	141.0 M
$2.50	46.2 M	61.8 M	79.4 M	99.3 M	121.9 M	147.4 M	176.3 M
$3.00	55.4 M	74.1 M	95.3 M	119.2 M	146.3 M	176.9 M	211.5 M
$3.50	64.7 M	86.5 M	111.1 M	139.1 M	170.6 M	206.4 M	246.8 M

Figure 2. Revenue to the Airport in millions (M) at Ground Lease rates of $1.00 - $3.50 / sq ft annually.

Airport assisted funding for development would likely be required at market rates of $30.00 / sq ft annually or less with the airport realizing the respective returns on the land found in the tables below.

Unlevered Airport	20 Years	25 Years	30 Years	35 Years	40 Years	45 Years	50 Years
$12.00	-44.2 M	-26.2 M	-5.9 M	17.1 M	43.2 M	72.7 M	106.0 M
$18.00	-15.8 M	12.6 M	44.7 M	81.0 M	122.1 M	168.7 M	221.3 M
$24.00	12.6 M	51.4 M	95.3 M	144.9 M	201.1 M	264.7 M	336.6 M
$30.00	41.0 M	90.2 M	145.8 M	208.8 M	280.1 M	360.7 M	451.9 M
$36.00	69.4 M	129.0 M	196.4 M	272.7 M	359.0 M	456.7 M	567.2 M
$42.00	97.8 M	167.8 M	247.0 M	336.6 M	438.0 M	552.7 M	682.5 M

Figure 3. Revenue to the Airport for an Unlevered Airport-funded development at Hangar Rent of $12.00 - $42.00 / sq ft annually.

Levered Airport	20 Years	25 Years	30 Years	35 Years	40 Years	45 Years	50 Years
$12.00	-69.0 M	-53.6 M	-44.6 M	-25.5 M	-10.5 M	14.1 M	36.3 M
$18.00	-40.6 M	-14.8 M	5.9 M	38.4 M	68.4 M	110.1 M	151.6 M
$24.00	-12.2 M	24.0 M	56.5 M	102.3 M	147.4 M	206.1 M	266.9 M
$30.00	16.2 M	62.8 M	107.1 M	166.2 M	226.4 M	302.1 M	382.2 M
$36.00	44.6 M	101.6 M	157.7 M	230.1 M	305.3 M	398.1 M	497.5 M
$42.00	73.0 M	140.4 M	208.3 M	294.0 M	384.3 M	494.2 M	612.8 M

Figure 4. Revenue to the Airport for a Levered Airport-funded development at Hangar Rent of $12.00 - $42.00 / sq ft annually.

Revenue to the airport for a private development with ground lease rates at $1.00 / sq ft annually is relatively comparable to an Airport-funded development with hangar lease rates at $12.00 / sq ft annually. A private development is less risk to the airport with returns of $18.5M - $70.5M over a term of 20 to 50 years (Figure 2) while an Airport-funded Unlevered development returns -$44.2M to $106.0M over the same period (**Error! Reference source not found.**). A Levered Airport-development introduces more risk with reduced returns of -$69.0 M to $36.3 M over the 20- to 50-year term (Figure 4). AGP believes the site may be better suited for a Cargo operator, Maintenance Repair and Overhaul (MRO) facility or other specialized aeronautical service operator other than a commercial private aviation hangar development given the weaker rates, available space on the market today, and unconfirmed demand in the MKC market.

This information provides the Airport with an opportunity to consider different courses of action for implementing the new development. These courses of action may be undertaken individually or simultaneously with each other. Taking one course of action does not necessarily eliminate the other courses of action from being pursued.

Go to Market – An RFP would provide opportunity to test the market interest.

Seek Grant Funding – This course of action would utilize the site plans, estimated development costs and pro forma as a basis to apply for local, state, federal, or other third-party grant funding to reduce the capital outlay requirement for the construction of the hangar and/or associated infrastructure. These reduced costs would reduce the required facility lease rates and/or financing costs, making the project potentially more financially attractive than competing airports.

Local Funding – This course of action would utilize municipal or airport bond funding sources, potentially in partnership with other organizations, to develop and construct the facility, then lease or sell the facility to a prospective tenant. This development could occur on speculation in advance of securing a tenant, or pursuant to securing a prospecting tenant, and may be the most financially feasible course of action as local funding sources would not require the same level of ROI as a third-party developer. This course of action would generate direct and indirect economic impacts as well as job creation, which would be desirable to the local community and support the funding initiative.

Any course of action the Airport proceeds with will provide opportunities to evaluate the data collected by this study, assisting in the negotiations with prospective parties, while using the same stress testing to evaluate business terms and secure a mutually agreeable ground lease. The Airport should consider all options to maximize the revenue potential in ground rent and other fees, while permitting a developer to secure a long-term ground lease that also provides the best opportunity to secure a financially feasible development, thus balancing the needs of both the Airport and the Developer.

EXHIBIT A – PROJECT ASSUMPTIONS

Construction Assumptions

- No costs assumed for remediation of contaminated soils.
- Escalation has been added to the midpoint of construction (4%).
- Prevailing Wage is NOT included.
- The aircraft apron is assumed to be 12" of concrete, over 4" of cement treated base, over 6" of Class II base, over excavating 18". The pavement is not assumed to be the FAA FAARFIELD mix design.
- Excludes rooftop photovoltaic system but does assume a minimum structural support for a future system if desired.
- Hangars are assumed to be standard span Pre-Engineered Metal Buildings (PEMB)
- Epoxy Floors are assumed to be included.
- Painting of all interior primary framing structures (excluding purlins and girts) is included.
- Fall protection systems are excluded.
- Foam Fire Suppression Sprinkler system is assumed to be included only in the two largest hangars.
- Daylighting CPI panels for natural light are assumed to be included.
- Big Ass Fans are assumed to be installed in each hangar.
- Bird Netting is excluded in all hangars.
- Utilities are assumed to be pulled from NW Lou Holland Drive
- The cost includes the development of a Fuel Farm somewhere on the site. This could be removed, if necessary, but the dollar amount is $2,500,000.
- LEED Silver is assumed for the buildings.
- Assumes the development of two new FAA Advisory Circular taxiway throat connections as shown on the site plan.
- Assumes a 1 Phase project with a 24-month construction duration.
- Assumes the Project will require a Payment and Performance Bond at approximately 1.25% of construction costs.
- Assumes a General Contractor Estimating Contingency of 5% and an Owner's Contingency of 5%.

Financial Assumptions

- Assumes 24-month construction project beginning January 2025,
- operational expenses on the project after construction of $1.19/SF annually,
- escalation of 2.5% annually,
- 75% occupancy on the site, and
- a levered amount of 80% total development cost at 6% interest rate over a loan term equal to half of the lease term.