

**Appendix J**  
Concession Space Requirements and Concession  
Program





# MEMORANDUM



**TO:** Dan Weber  
DAL Director of Aviation

**CC:** Andy Weddig, Unison

**FROM:** Firelli Braunagel

**DATE:** January 12, 2009

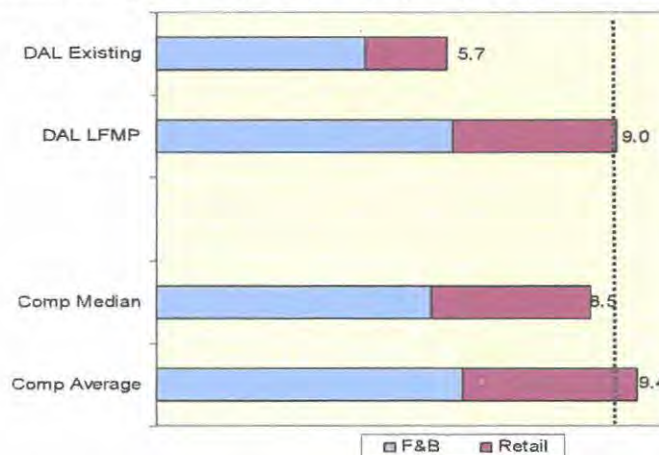
**SUBJECT:** *Concession Space Requirements for LFMP*

Unison reviewed the memorandum dated January 9<sup>th</sup> "Activity Forecast Concerns regarding Concessions Program" from L. Salomon of AvAirPros. Overall, the planned concessions program in the Corgan plans is adequately sized for opening day of the new terminal but will be constrained in the upcoming years as enplanement traffic increases. Our comments are provided below and additional analysis is provided in the Appendix.

**Concession Space Requirements per SF are reasonable.**

Unison's concession space requirements for the LFMP is 9.0 square feet per 1,000 annual projected enplanements, which is based on an analysis of facility, passenger, and concession characteristics for the new terminal. This number is in line with other medium hub airports. Our analysis of 23 comparatively sized airports indicates optimal concessions are sized between 8.5 to 9.4 square feet per 1,000 annual enplanements (Figure 1).

**Figure 1**  
**Concession Space Requirements (SF per 1,000/Enplanements)**



It is important to note that the comparable airports referenced in the memorandum include a limited number of airports (only seven), many of which are undersized and generate relatively low sales per enplanement. Our analysis includes a wide range of medium hub airports including new and older concessions programs, which is best for benchmarking purposes.

**Enplanement projections used for concession requirements are conservative.**

Based on the space requirements above, Unison estimates that 47,584 square feet of revenue generating space is needed for the concession program in 2015. An additional 30% of space will be needed for storage and support space, which equate to approximately 14,000 square feet. These space requirements assume enplanements of 5,261,000 are projected to be reached in the year 2015<sup>1</sup>. Assuming projected enplanements of 7,344,568, approximately 66,429 square feet of revenue generating concession space and nearly 20,000 square feet of storage and support space is required to accommodate passenger demand (Table 1). It is important to note that the enplanement projections Unison used to estimate space requirements are lower than those in the TARPS Study, which shows enplanements of 8,653,965 are projected to be reached in 2025.

**Table 1  
 Concession Space Requirements**

Retail Category	Developed SUF	Unison's Recommended Space Requirement		
		2015	2020	2025
Food & Beverage	5.8	30,514	36,746	42,598
Retail	3.2	17,070	20,556	23,831
<i>Revenue Generating Space</i>	9.0	47,584	57,302	66,429
Storage/ Support Space		14,275	17,191	19,929
<b>TOTAL SF REQUIREMENT</b>		<b>61,859</b>	<b>74,493</b>	<b>86,358</b>
Projected EPs		5,261,000	6,335,489	7,344,568

Notes:

1. Space Utilization Factor (SUF) is based on ranking of passenger, facility and concession characteristics and equals amount of SF per 1,000 EPs.
2. Enplanements are estimated to increase 3% annually, based Unison's projections from Rates and Charges Study.
3. Space requirements calculated based on total annual enplanements. (SUF x TOTAL EP / 1000)
4. Projected space requirements for Storage/Office Space represents 30% of food & beverage and retail space.

**Concession space planned for the LFMP will be insufficient to meet future passenger demand.**

Based on the Corgan plans dated November 5, 2008, the amount of space available for concessions development will be insufficient to meet future demand. Unison's concession plans identify approximately 52,217 square feet of revenue generating concession space in the LFMP, which will provide an adequately sized concession program during the first few years of the new terminal. Although the memorandum indicates approximately 56,000 square feet is provided for concession space in the Schematic Design Plans, it is important to note that some of this space is

<sup>1</sup> Enplanement forecast is based on Unison's Rates and Charges Study.

not viable for concessions. Approximately 7,000 square feet of planned concession space is located landside, away from the natural flow of departing passengers. Ideally, concession space should be located airside near the departure gates in the main path of passengers.

Assuming enplanements of 6.4 million are projected to be reached in 2020, the concession program will be constrained by this time (Table 2). Approximately 57,302 square feet of concession space is required to meet this level of traffic, which means an additional 5,085 square feet of concession space is needed. To accommodate enplanements of 7.3 million projected to be reached in 2025, a total of 66,429 square feet of concession space is required. If the terminal plans provide for only 52,217 square feet of concession space, customer service and revenue potential will be compromised as enplanement traffic increases.

**Table 2  
 Planned Concession Space vs. Space Requirements**

	Planned SF LFMP	Unison's Space Requirements		
		2015	2020	2025
Food & Beverage	33,883	30,514	36,746	42,598
Retail Concessions	18,334	17,070	20,556	23,831
Revenue Generating	52,217	47,584	57,302	66,429
<b>Surplus/ (Deficit)</b>		<b>4,633</b>	<b>(5,085)</b>	<b>(14,212)</b>
Projected EPs		5,261,000	6,335,489	7,344,568

*Support.*

1. Space requirements are based on 5.8 SF (food & beverage) and 3.2 SF (retail) per 1,000 enplanements
2. Enplanements are estimated to increase 3% annually, based Unison's projections from Rates and Charges Study.
3. Planned SF for LFMP are based on Corgan plans dated 11-08.

**Additional concession space should be identified and reserved for future development.**

Unison recommends a minimum of 57,302 square feet of concession space be planned for the new terminal, which would accommodate enplanements of approximately 6.3 million projected to be reached in 2020. However, to maintain optimal service and concession revenues, additional concession space is required to accommodate future passenger demand. As enplanement traffic grows, additional concession facilities can be phased into the program.

I hope this information is helpful. Please let Andy or me know if you have any questions or comments.

*Need an Airport Study.*

**From:** "Boggus,Roddy" <rodgy\_boggus@gspnet.com>  
**To:** "Weber,Dan" <dan.weber@dallascityhall.com>, <firellibraunagel@unison-ucg.com>  
**cc:** "Rincon,Diego" <diego.rincon@dallascityhall.com>, "Mitchell,Terry" <terry.mitchell@dallascityhall.com>, <Karen\_Kavanagh@URSCorp.com>

**Date:** Thursday, January 15, 2009 05:03AM  
**Subject:** RE: Concessions Program

Dan,

My response is below:

1. First of all, the TARPS does say, in Chapter 2, that the TAF was revised upward to reflect the anticipated growth of enplanements at DAL, particularly Southwest Airlines, page 2-10. This refutes anyone saying that the TARPS indicates or says that the TAF does not reflect the Five Party Agreement.
2. The TARPS says specifically in several places, that the max of 10 turns-per-gate in 2014 equals the baseline forecast of air carrier operations at DAL. However, please note that this is the baseline in 2014...not later.
3. the TARPS goes on to say that "15 turns-per-gate represents the absolute maximum enplanements that the 20-gate restricted terminal can manage without larger aircraft or larger load factors." The key word here is "enplanements" not 15 turns-per-gate.
4. The number generated by the TARPS for the 15 turns-per-gate is roughly the same at the TAF projections for the year 2025.
5. In Chapter 2, 10 Turns-Per-Gate is presented as the design level forecast for DAL under the Five Party Agreement (page 2-19). This table shows for 2014, enplanements of 5,865,580. It goes on to show for 2025 enplanements, 8,798,380 (also for 10-turns). This is page 2-20.
6. The TARPS is showing square footage, for concessions, 11.8 square feet / 1000 annual enplanements (for 2014 enplanements of 5,865,580); and is showing 9.6 square feet / 1000 enplanements (for 2025 enplanements of 8,798,380).

All of this being said, I guess the following is in order:

There is not prescribed level of service requirement for concessions other than percentages on landside and airside. IATA describes sizing retail concessions as follows:

"Retail concessions are planned based on supportable space. Using market research, comparisons with successful concession programs at other airports of similar size and traffic characteristics, and historical concession performance at the airport, sales per enplanement (SPE) in the six concession categories are forecast. These annual SPE's are then combined with forecast annual enplanements and typical concession sales productivity (sales per unit area) to arrive at supportable concession space."

The TARPS clearly states that the baseline planning criteria is for 10-Turns-A-  
 gate for 2014 and 15-Turns-A-gate for 2025. However, the TARPS clearly shows the  
 annual enplanements for 2014 and 2025. The annual enplanements should be  
 5,865,580 for 2014 and 8,798,380 for 2025. The TARPS also shows the  
 square footage for concessions for 2014 and 2025. The square footage for  
 concessions for 2014 is 11.8 square feet / 1000 enplanements and for  
 2025 is 9.6 square feet / 1000 enplanements. Based on this logic the TARPS  
 recommends 11.8 square feet / 1000 enplanements for 2014 and 9.6 square  
 feet / 1000 enplanements for 2025. I have no problem with this. However,  
 the TARPS also shows the square footage for concessions for 2014 and 2025  
 based on a maximum bird-out space of 2000 square feet per enplanement.  
 This seems to be some conflict in the maximum bird-out space for 2025  
 between the TARPS and the Rates and Charges. As such, Unison has chosen to  
 take the Rates and

...and the design of the building and the concessions would have to be made by a specialist at a later time. Based on my review of Unison's work I have no problem with their 9.0 square foot / 1000 annual enplanements for 2014. However there seems to be some conflict in the maximum build-out space for 2025 between the TARPS and the Rates and Charges. As such, Unison has chosen to take the Rates and Charges annual enplanements for 2025 rather than the TARPS.

Finally, I do believe that annual enplanements could easily reach the 8.8M as prescribed in the TARPS due to multiple peaks, a large outbound bank that exceeds typical peak hour forecasting or high load factors just to name a few scenarios.

I hope this is helpful in your meeting this morning. I should be available by phone around 10:00 a.m.

Sincerely,

Roddy L. Boggus, NCARB, AIA

Gresham, Smith and Partners  
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-----Original Message-----

From: Weber, Dan [<mailto:dan.weber@dallascityhall.com>]  
Sent: Sunday, January 11, 2009 5:19 PM  
To: firellibraunagel@unison-ucg.com; Boggus, Roddy  
Cc: Rincon, Diego; Mitchell, Terry  
Subject: FW: Concessions Program

Firelli, Roddy:

Please see the attached memo from AvAirPros, apparently on behalf of the PMT, explaining their decision that the City's position on planning levels for enplanements is just foolish. We have a Steering Committee meeting Thurs, and I would like the benefit of your comments regarding their edicts on your respective areas of expertise so we can respond appropriately (i.e., I don't think we have advocated providing 84,000sf of concession space as they have stated).

Thanks, Dan.

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From: Rincon, Diego  
Sent: Fri 1/9/2009 4:57 PM  
To: Weber, Dan  
Subject: Concessions Program

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All of this being said, I guess the following is in order. There is not prescribed level of service requirement for concessions other than percentages on landside and airside. IATA describes sizing retail concessions as follows:

"Retail concessions are planned based on supportable space. Using market research, comparisons with successful concession programs at other airports of similar size and traffic characteristics, and historical concession performance at the airport, sales per enplanement (SPE) in the six concession categories are forecast. These annual SPE's are then combined with forecast annual enplanements and typical concession sales productivity (sales per unit area) to arrive at supportable concession space."

The TARPS clearly states that the baseline planning criteria is for 10-Turns-A-Gate or 5,865,580 annual enplanements. However, the TARPS clearly shows the annual enplanements for 2025 to be 8,798,380. Therefore, while the baseline planning scenario (2014) is 5.8M annual enplanements the case can be made that if the maximum build-out is for 2025 then the annual enplanements should be 8.8M annual enplanements. Based on this logic the TARPS recommends 11.8 square feet / 1000 enplanements for 2014 and 9.6 square feet / 1000 enplanements for 2025.

As I stated before, this was included as a "reservation of space" for the TARPS and that the actual spatial allocation for concessions would need to be done by a specialist at a later time. Based on my review of Unison's work I have no problem with their 9.0 square feet / 1000 annual enplanements for 2014. However there seems to be some conflict in the maximum build-out space for 2025 between the TARPS and the Rates and Charges. As such, Unison has chosen to take the Rates and Charges annual enplanements for 2025 rather than the TARPS.

Finally, I do believe that annual enplanements could easily reach the 8.8M as prescribed in the TARPS due to multiple peaks, a large outbound bank that exceeds typical peak hour forecasting or high load factors just to name a few scenarios.