

9.0

Economic Feasibility and Financial Analysis



9.0 *ECONOMIC FEASIBILITY AND FINANCIAL ANALYSIS*

Milwaukee County (the County) operates the Airport System, which is comprised of General Mitchell International Airport (MKE) and the Lawrence J. Timmerman Airport (LJT). This chapter presents a financial plan for MKE's proposed Capital Improvement Plan (CIP). The plan incorporates the Airport's on-going CIP and the master plan projects that were discussed earlier in Chapter 8 of this report. In addition, the financial plan presents an analysis of the financial feasibility of the proposed master plan projects, including a projection of the impact that these projects will have on the Airport's operating revenues and expenses, debt service requirements, rates and charges, cost per enplanement and annual cash flow for the forecast period Calendar Years (CY) 2008 through 2022. Listed below are various sections of this chapter and a description of the content of each:

- 9.1 – Overview of the calculation of the master plan project cost in future dollars.
- 9.2 – Overview of the financial plan for the CIP for the three planning periods; Phase I (CY 2008 – 2012), Phase II (CY 2013 – 2017) and Phase III (CY 2018 – 2022).
- 9.3 – Overview of MKE's current financial framework, including a discussion of the airline lease and the rates and charges methodology.
- 9.4 – Discussion pertaining to the projection of operating and maintenance expense, including the underlying assumptions.
- 9.5 – Discussion pertaining to the calculation of the projected airport system revenues including a discussion of the underlying assumptions.
- 9.6 - Analysis of the impact of the CIP on annual debt service.
- 9.7 – Analysis of the impact of the CIP on Airline rates and charges and cost per enplanement.
- 9.8 – Discussion pertaining to the impact of the CIP on the Airport's annual cash flow and debt service coverage.
- 9.9 – Identify alternatives for the new Airline Use and Lease Agreement.

9.1 Calculation of Master Plan Project Cost

The Master Plan projects as presented and described in Chapter 8 are listed on **Table 9.1-1**. This table, in the first numerical column, shows the master plan project construction costs in 2007 dollars. The second numerical column shows the total project costs including soft costs, which are mobilization, design, program management, and contingency. In the third numerical column are the total project costs escalated to their years of completion.

Table 9.1-1
General Mitchell International Airport
PROPOSED MASTER PLAN PROJECTS
ESCALATED COSTS

NO.	PROJECT DESCRIPTION	TOTAL CONSTRUCTION COST IN 2007 DOLLARS ¹	TOTAL PROJECT COSTS IN 2007 DOLLARS ²	TOTAL MASTER PLAN COSTS IN ESCALATED DOLLARS ³	PROJECT COMPLETION DATE	MAJOR CATEGORY
A	Proposed Runway 7R-25L	\$234,064,547	\$336,693,593	\$527,912,399	2021	Airfield
B	Terminal Modernization (Phase I, II, and III)	\$53,237,608	\$77,194,532	\$121,515,179	2017/2018	Terminal
C	Air Cargo Facilities (Phase I & II)	\$30,088,212	\$43,447,908	\$67,927,614	2012/2021	Air Cargo
D	Runways 7R-25L & 1L-19R RSA Improvements	\$52,559,150	\$76,210,768	\$88,266,524	2013	Airfield
E	Concourse F	\$52,764,623	\$76,508,704	\$90,346,912	2012	Terminal
F	Parking Garage Expansion	\$28,284,822	\$41,012,992	\$51,953,874	2012	Landside & Parking
G	Remote Parking Structure (Phase I & II)	\$109,506,156	\$158,783,926	\$264,375,498	2016/2021	Landside & Parking
H	Remote Employee Parking	\$1,100,664	\$1,595,963	\$1,813,840	2010	Landside & Parking
I	Airport Maintenance	\$2,453,824	\$3,558,044	\$5,689,075	2017	Landside & Parking
J	Runway 7R Extension (Ultimate 7C)	\$13,465,391	\$18,624,817	\$30,193,120	2020	Airfield
K	Concourse G	\$132,522,407	\$192,157,490	\$361,879,989	2021	Terminal
M	Connector Taxiways (V&H and T&R)	\$10,835,790	\$15,711,896	\$27,231,257	2011/2021	Airfield
Total Master Plan Project Costs		\$720,883,195	\$1,041,500,633	\$1,639,105,281		

¹ Includes only hard construction cost figures.

² Includes both hard and (where applicable) soft costs figures. Soft costs include 5% mobilization, 20% for design and program management and 20% for contingencies.

³ Assumes professional labor to escalate annually at 3.4%, construction labor to escalate annually at 3.3%, and land to escalate annually at 3.5%, equipment to escalate annually at 1.9% and materials to annually escalate at 6.4%. All project dollars escalated to year of project completion.

9.2 Development of Financing Plan

The Airport currently has an ongoing CIP totaling approximately \$219.6 million. In order to develop a financing plan for MKE, the Airport's ongoing CIP must be added to the

Master Plan CIP shown in **Table 9.1-1**. The combination of the Airport's on-going CIP and the Master Plan CIP is estimated to cost approximately \$1.9 billion during CYs 2008 – 2021 shown in **Table 9.2-1**. This table provides a summary of the combined CIP grouped by major project category and development phases: Phase I (2008 – 2012), Phase II (2013 – 2017) and Phase III (2018 – 2022) as defined in chapter 8.

The CIP shows Airfield projects totaling \$825.5 million or (44%) of the total CIP, Terminal projects totaling \$650.4 million or (35%), Landside and Parking projects comprising \$378.8 million or (20%) and various other airport projects totaling \$4.0 million.

TABLE 9.2-1
SUMMARY OF COMBINED CAPITAL IMPROVEMENT PROJECTS
General Mitchell International Airport
For Calendar Years 2008 - 2021
(\$ in millions)

Major Project Category	2008	2009-2012	2013-2017	2018-2021	Total
Airfield Projects	\$14.1	\$177.6	\$152.7	\$481.1	\$825.5
Terminal Projects	3.4	163.6	115.4	368.0	650.4
Landside and Parking Projects	6.4	99.9	145.0	127.5	378.8
Other Projects	0.7	3.2	0.1	0.0	4.0
Grand Total CIP	\$24.6	\$444.3	\$413.2	\$976.6	\$1,858.7

9.2.1 *Potential Funding Sources*

The funding plan focuses on optimizing the use of all available sources of funding, including federal Airport Improvement Program (AIP) funds, Federal Highway Administration funds, passenger facility charges (PFCs) and local and state grants that are potentially available to the Airport. The strategy is to maximize the use of all funding sources based on the eligibility of the projects. Funding requirements remaining after applying the various available sources of equity funding will be funded through the issuance of debt.

Table 9.2-2 provides a summary of the planned funding requirements, based on the composition of projects in the proposed CIP. The funding plan anticipates using: AIP grants totaling \$228.4 million; PFCs totaling \$268.5 million comprised of \$163.9 million of PFC

enhanced bonds and \$104.6 million that will be applied on a pay-as-you-go basis; State of Wisconsin grants and other funds, including TSA moneys totaling \$61.0 million. The balance of the project costs not funded through other sources will be funded with General Airport Revenue Bonds (GARBs) totaling \$1.3 billion. The following is a brief discussion of each funding source.

TABLE 9.2-2
SUMMARY OF COMBINED CAPITAL IMPROVEMENT PLAN FUNDING SOURCES
General Mitchell International Airport
For Calendar Years 2008 - 2021
(\$ In millions)

Funding Source	2008	2009-2012	2013-2017	2018-2021	Total
AIP Grants / Noise Discretionary	\$10.1	\$102.0	\$46.3	\$70.0	\$228.4
Passenger Facility Charges:					
Pay-As-You-Go PFCs	9.0	42.8	22.7	30.0	104.6
PFC-Backed Bonds	0.0	101.1	31.7	31.1	163.9
State Grants	1.7	15.7	6.0	8.0	31.4
Other Funds / TSA Funds	2.0	27.7	0.0	0.0	29.6
General Airport Revenue Bonds (GARBS)	2.0	155.0	306.4	837.4	1,300.7
TOTAL CIP FUNDING SOURCES	\$24.8	\$444.3	\$413.1	\$976.5	\$1,858.7

9.2.1.1 *Airport Improvement Program Grants*

The AIP was authorized by the Airport and Airway Improvement Act of 1982 (AIP Act). The AIP Act provides funding for airport planning, development and noise compatibility projects for public use airports that are included in the National Plan of Integrated Airport Systems (NPIAS). The AIP program contains two principal sources of AIP grants: 1) entitlement funds which are apportioned among commercial airports based on passenger enplanements and cargo activity and, 2) discretionary funds which are distributed to airports to fund projects that enhance safety and security, preserve existing infrastructure, provide additional airfield capacity, and improve compatibility with neighboring communities. Under current law each medium and large hub airports' apportionment of AIP entitlement funds is reduced by 50% if the airport collects a \$3.00 PFC and 75% if the airport collects a \$4.50 PFC. MKE is currently classified as a medium hub airport based on its calendar 2007 enplanements meeting the requirement of being between 0.25% and 0.99% of the total U.S. passenger enplanements.

The Airport and Airway Safety and Capacity Expansion Act of 1987 authorized the Federal Aviation Administration (FAA) to administer the Letter of Intent (LOI) program. The LOI was developed to provide an airport a multi-year commitment of funding, pending annual appropriations made by the U.S. Congress. An LOI is typically reserved for projects that are determined by the FAA to have a positive effect on the nation's air transportation capacity and are estimated to have a benefit-cost ratio of at least 1.0 or a net present value of at least zero. The Airport has not previously applied for an LOI.

The Master Plan contains a Proposed Runway 7R-25L with an estimated cost of approximately \$528 million. The current funding plan assumes, based on LOI funding for new runways at other airports, that MKE could potentially receive an LOI for \$100 million over a period of approximately seven to nine years. This funding plan further assumes that Airport management will apply other funds, if needed, to get the full benefit of the LOI. These other funds, if used, would be reimbursed after the Airport receives the LOI grant receipts. The current funding plan anticipates a combined use of AIP grants including, LOI, and noise discretionary funds totaling \$228.4 million.

9.2.1.2 *Passenger Facility Charges*

MKE currently has the authority to collect PFCs up to approximately \$16.8 million with an end date of April 1, 2025 at a rate of \$3.00 per qualifying enplanement. However, the funding plan anticipates that Airport management will obtain approval from the FAA to collect at the rate of \$4.50 per enplanement effective in CY 2009. The plan anticipates using a portion of this funding source on a pay-as-you-go basis and the remaining amount to pay debt service for GARBs issued to pay for PFC-eligible projects. The plan anticipates the issuance of PFC-enhanced bonds for \$163.9 million of project costs and \$104.6 million of PFCs applied on a pay-as-you-go basis.

9.2.1.3 *State Grant Funding*

The State of Wisconsin provides matching funds for projects that receive AIP grants from the FAA. Generally, if the Airport receives an AIP grant for 75% of the cost of a project, the State of Wisconsin will provide a grant of 12.5% of the cost provided that the Airport provides the remaining 12.5% of the funding. It is assumed that MKE will receive approximately \$31.4 million in State of Wisconsin grant funds including approximately \$2.4 million per year during CY 2017 to 2021 when the new runway is being constructed.

9.2.1.4 *Other Funds Transportation Security Administration/Airport Surplus Funds*

The current funding plan estimates that additional funds will be available from the Airport Surplus Funds (ASF) and the Transportation Security Administration Funds (TSA). The ASF represents excess money generated from the airport operations after all obligations are met. The TSA was formed following the events of September 11, 2001, to assist in providing security for the U.S. transportation system. The funding plan assumes approximately \$20.6 million of TSA and \$9.0 million in ASF funds.

9.2.1.5 *General Airport Revenue Bonds*

The funding plan assumes applying various equity sources first before utilizing debt funds. However, it will be necessary to issue additional debt in order to fully fund the CIP projects. Therefore, the plan anticipates issuing GARBs in the amount of \$1.3 billion in order to meet the remaining funding requirements of the CIP. The GARBs will be payable from general airport revenues.

9.3 *Airport System Financial Framework*

The County operates the Airport System, which is comprised of MKE and the LJT Airport, as an Enterprise Fund in accordance with generally accepted accounting principles (GAAP) for governmental entities.

The Airport System currently operates under a residual rate methodology agreement with 12 air carriers, which captures the cost related to the airport operations through six cost/revenue centers. The six cost/revenue centers are:

- Airfield
- Terminal
- Apron
- Roads and Grounds
- Air Freight
- Flexible Response Security

The airlines serving the Airport through the payment of rates and charges are required to pay for all costs of operating the Airport that are not paid from other sources. The Airport Use and Lease Agreement (AUA) requires that all revenues earned at the Airport, such as revenues from the Airport's concession program, be applied against the costs of operating the Airport prior to the calculation of the airline rates and charges.

The current AUA is scheduled to expire on September 30, 2010. However, the financing plan developed in this document assumes that the current cost center structure and rates and charges methodology will exist throughout the forecast period. However, during the forecast period this report assumes that, when necessary, Airport management may be required to make changes to the rate methodology that are beneficial to the Airport and the airlines currently providing service.

Therefore, this report includes certain adjustments to the rate methodology that are believed to be necessary and in the best interest of the parties. However, such changes when made do not change the basic residual nature or intent of the AUA.

Airline Rates and Charges Methodology

The primary airline rates and charges for the use of the Airport and its facilities are landing fees, terminal rates, apron fees and flexible response security charges. The airline rates

and charges are calculated using a cost center residual methodology, whereby the airlines are responsible for paying landing fees, terminal rentals, and apron rentals to recover the annual net deficits in the Airfield, Terminal, and Apron cost centers. The methodology for calculating each of the rates is briefly described below.

a) *Landing Fees.* The Signatory Airlines are responsible for paying landing fees in an amount necessary to recover the Airfield net deficit, which is defined as total annual Airfield expenses minus a credit for non-airline airfield revenues. Airfield expenses consist of:

- Operation and Maintenance (O&M) expenses
- Depreciation (principal payments on General Obligation (GO) bonds issued before 2000)
- Principal and Interest on bonds issued in 2000 and after.

The Airfield expenses listed above are reduced by the following revenue credits to arrive at the Airfield net deficit:

- Military landing fee revenue
- General aviation revenues
- Air cargo rents

The non-signatory airlines are charged a landing fee that is 120% of the fee charged to signatory airlines, and non-signatory cargo carriers are charged a landing fee that is 105% of the fee charged to signatory airlines.

b) *Terminal Rents.* The Signatory Airlines pay annual terminal rent in an amount necessary to recover the Terminal net expense. The Terminal net deficit is calculated by aggregating all expenses for the Terminal cost center and the Roads and Grounds cost center and deducting certain revenues that are used to offset these expenses as listed below.

- Annual Terminal O&M expenses

- Annual Terminal Cost Recovery Amount
- Depreciation (principal payments on GO bonds issued before 2000)
- Principal and Interest on bonds issued in 2000 and later

The Terminal net deficit is computed by reducing the Terminal expenses listed above by the following revenue credits:

- Non-airline terminal rentals
- Concession revenues
- Public Parking revenues
- Other airline revenues, including Utility Resale and Passenger Service Fee revenues.

Rental charges for Terminal space occupied by the signatory airlines are based on a unit of measure called the Equivalent Rental Unit (ERU).

The number of ERUs leased by the signatory airlines is determined by multiplying the square footage of each type of space by weighting factors ranging from 0.20 to 1.10 that are based on the relative cost of providing that type of space. The Terminal net deficit is divided by the number of ERUs leased to airline tenants to derive the airline terminal rental rate. All non-signatory airlines are charged a terminal rate that is 120 percent of the rate charged to signatory airlines for a similar space.

c) *Apron Fees.* Signatory airlines pay annual Apron fees equal to the net deficit for the Apron cost center. The net deficit is calculated as total Apron expenses (O&M expenses, interest, and depreciation) minus non-airline revenues and adjustments. The Apron fee rate is calculated as the Apron net deficit divided by the linear footage of gate positions. Non-signatory airlines pay an apron fee rate that is 120 percent of the rate charged to signatory airlines.

d) *Flexible Response Security Charges.* Flexible Response Security Charges revenue represents amounts collected from the airlines to recover the cost of services provided by the County Sheriff's Department.

9.4 Projected Airport Operating and Maintenance Expenses

The projected O&M Expenses for the forecast period are summarized on **Table 9.4-1**. Based on available information, the O&M Expense projections were developed using the following assumptions:

- Latest estimate of CY 2008 budget provided by MKE staff were used as the base.
- General inflation factor averaging 3.1% annually for each expense category.
- Escalated O&M Expenses for new projects based on historical spending per appropriate unit of measure escalated at the rate inflation.
- Other professional judgment and assumptions as deemed appropriate.

As a result, total O&M Expenses are projected to increase from \$52.1 million in CY 2008 to a total of \$282.2 million for Phase I compared with \$367.3 million in Phase II and \$487.7 million for the Phase III. The planning periods for Phase I and II comprise over 50% of the total O&M expenses for the forecast period, which is attributed to the anticipated completion of the following: Baggage Claim Area Renovation in CY 2010, as well as the completion of Concourse F, the Parking Garage Expansion, and the Cargo Apron Expansion in CY 2012. The key project during Phase II is the completion of the Remote Parking Garage Phase I in CY 2016. The remainder of the increase was attributed to the completion of two key long-term projects, consisting of the New Runway and Concourse G that are scheduled for completion during CY 2021.

TABLE 9.4-1
MILWAUKEE COUNTY AIRPORT SYSTEM
PROJECTED OPERATING AND MAINTENANCE EXPENSES
FOR CALENDAR YEARS 2008 - 2022
(\$ in Millions)

Cost Center	Projected Operating and Maintenance Expense				Avg. Ann. Grth Rate	Avg. Ann. Grth Rate	Avg. Ann. Grth Rate	Avg. Ann. Grth Rate
	2008 ¹	2008-2012	2013-2017	2018-2022	2008 - 2012	2013-2017	2018-2022	2008-2022
Terminal	\$31.3	\$172.5	\$233.2	\$328.7	5.8%	8.6%	7.6%	6.8%
Airfield	\$17.0	\$90.8	\$111.7	\$131.7	3.7%	3.3%	6.8%	4.4%
Apron	\$1.4	\$7.9	\$10.2	\$13.1	7.9%	3.2%	8.6%	6.0%
Flexible Response Security	\$2.4	\$10.9	\$12.2	\$14.2	-1.5%	3.0%	3.1%	1.7%
Total O & M Expenses	\$52.1	\$282.2	\$367.3	\$487.7	4.9%	6.7%	7.3%	5.9%

¹ CY 2008 Budget provided by MKE staff.

9.5 *Projected Airport System Revenues*

The projected Airport System Revenues are shown on **Table 9.5-1**. The Airport System Revenues consist of all monies received by the Airport System from any source, including all rates, fees, charges, rents and other income derived by Milwaukee County (the County) from the ownership or operation of the Airport System. This does not include any grants and any other non-operating revenues. The MKE staff provided the CY 2008 Budget as the base for the revenue projections. In addition, the following assumptions were used to forecast the Airport System Revenue projections:

For Airline Revenues the forecast was based on:

- Impact of debt service being rate based for selected projects
- Increase in O&M related expenses proportionate to completed projects
- Offset by changes in non-airline revenue credits

For non-Airline revenues the forecast was based on:

- CPI escalation factors of 2.5% between years 2008 – 2012 and 3.0% for the remainder of the forecast period.
- Annual growth of both origin and destination enplanements for car rental and public parking revenues and total enplanements for merchandising, food and beverage concession revenues.
- Anticipated changes in annual minimum guarantees on concessions contracts.
- Impact of introduction of new concession concepts.

Based on these assumptions Airport System Revenues are projected to increase from \$73.0 million in CY 2008 to a total of \$418.1 million in Phase I, \$627.4 million in Phase II and \$942.1 million in Phase III, which represents an average annual increase of 10.8% during the master plan period. The significant portion of the increase in Airport System Revenues occurs during Phase III, resulting from the completion of the New Runway and Concourse G during CY 2021. This is followed by Phase II which totals \$627.4 million, which is attributed to the completion of Phase I of the Remote Parking Garage in 2016 and completion of the first two phases of the terminal modernization program in 2017.

TABLE 9.5-1
MILWAUKEE COUNTY AIRPORT SYSTEM
PROJECTED AIRPORT SYSTEM REVENUE
FOR CALENDAR YEARS 2008 - 2022
(\$ in Millions)

Airport Revenues	Projected Airport System Revenues				Avg. Annual Growth Rate	Avg. Annual Growth Rate	Avg. Annual Growth Rate	Avg. Annual Growth Rate
	2008 ¹	2008 - 2012	2013-2017	2018-2022	2008-2012	2013-2017	2018-2022	2008-2022
Airfield								
Landing Fees								
Signatory Landing Fees	\$12.3	\$52.6	\$92.1	\$131.0				
Non-Signatory Landing Fees	1.4	8.6	16.0	22.7				
Total Landing Fees	\$13.7	\$61.2	\$81.8	\$134.8	-6.8%	3.1%	56.8%	16.3%
General Aviation and Other								
Hydrant Fueling Revenues	\$0.2	\$0.4	\$0.1	\$0.0				
Hangar Rentals	0.5	2.5	2.8	3.3				
Fuel and Oil Revenue	0.2	1.3	1.2	1.3				
Fixed Base Operator	0.4	2.3	2.6	3.0				
Total GA and Other	\$1.3	\$6.4	\$7.0	\$7.9	0.0%	2.1%	3.0%	1.9%
Air Cargo Rentals	\$0.6	\$3.1	\$3.6	\$4.1	2.5%	3.0%	3.0%	2.9%
Total Airfield Revenues	\$15.6	\$70.7	\$118.7	\$165.7	-5.7%	3.0%	53.2%	15.4%
Terminal								
Signatory Airlines								
Space Rentals	\$5.0	\$17.7	\$29.3	\$96.5				
(Over)/Under recovery	0.0	0.0	0.0	1.0				
Other Charges and Fees	0.5	2.8	3.4	4.1				
Total Signatory Airlines	\$5.5	\$20.5	\$32.8	\$101.6	-4.3%	32.4%	31.7%	15.8%
Concessions								
Car Rental	\$7.6	\$43.2	\$59.5	\$81.5				
Gifts & Novelty	1.5	9.2	15.4	22.5				
Food & Beverage	2.0	13.5	20.4	31.8				
Other	1.5	8.4	11.7	16.4				
Total Concessions	\$12.5	\$74.3	\$106.9	\$152.3	8.1%	6.9%	7.1%	7.6%
Public Parking	\$26.3	\$155.7	\$239.8	\$363.2	7.9%	8.6%	9.1%	8.8%
Total Terminal Revenues	\$44.3	\$250.6	\$379.5	\$617.1	6.7%	10.4%	12.7%	9.8%
Apron								
Signatory Apron Fees	\$1.2	\$7.8	\$13.7	\$20.9				
Non - Signatory Apron Fees	0.1	0.4	0.5	0.6				
Total Apron Revenues	\$1.3	\$8.2	\$14.2	\$21.5	10.0%	2.4%	27.9%	13.9%
Other								
Flexible Response Security	\$1.9	\$10.3	\$11.9	\$13.8				
Other Revenues/Services	3.0	\$15.9	\$18.2	\$21.1				
Total Other Revenues	\$5.0	\$26.1	\$30.1	\$35.0	2.7%	3.0%	3.2%	3.0%
PFC Revenues ²	\$6.9	\$62.5	\$85.0	\$102.8	22.1%	5.7%	3.0%	8.5%
TOTAL AIRPORT REVENUES	\$73.0	\$418.1	\$627.4	\$942.1	6.1%	7.6%	15.3%	11.0%

¹ CY 2008 Budget provided by MKE staff.

² As defined by the Indenture these PFC revenues are solely for the repayment of eligible PFC debt service.

9.6 *Projected Debt Service*

The projected annual Debt Service for the forecast period is summarized in **Table 9.6-1**. The annual debt service is projected to increase significantly during the planning period resulting from the issuance of five (5) separate financings totaling approximately \$1.9 billion in GARBS and an additional \$180.7 million in PFC backed bonds, which include financing costs. The timing of the bond financings were based on the cash flow requirements of the master plan projects and to minimize the capitalized interest requirements. The annual debt service is projected to increase from \$18.4 million in CY 2008 or an aggregate of \$118.7 million during Phase I to an aggregate of \$419.2 million in CY during Phase III. The five bond financings are summarized below:

- Issuance of approximately \$47.0 million of GARBs in CY 2009 to fund vacant land acquisition for C1 runway, Phase 1 development of Sixth Street parking and design costs for main electric service feed and the baggage claim relocation.
- Issuance of approximately \$270.5 million of GARBs in CY 2010 to fund Phase 1 of the cargo apron expansion, the design and construction for Phase 2 of the parking structure and a portion of the new Concourse F project.
- Issuance of approximately \$230.7 million of GARBs in CY 2015 to fund Phase 1 of the remote parking garage and a portion of Phase 1 of the terminal modifications.
- Issuance of approximately \$679.0 million of GARBs in CY 2017 to fund a portion of the new runway 7R-25L, Phases 2 and 3 of the terminal modifications and Concourse G.
- Issuance of approximately \$766.4 million of GARBs in CY 2020 primarily to fund the remainder of the new runway 7R-25L, Phase 2 of the cargo apron expansion, Concourse G and phase 2 of the remote parking garage.

The assumptions used for all bond sizings were a 6% interest rate, 25-year bond term, capitalized interest for GARB bonds for an average of 2.8 years, cost of issuance at 1.5% of par amount, and funded debt service reserve equal to one year maximum annual debt service.

TABLE 9.6-1
MILWAUKEE COUNTY AIRPORT SYSTEM
PROJECTED ANNUAL DEBT SERVICE
FOR CALENDAR YEARS 2008 - 2022
(In Millions)

DEBT SERVICE	Projected Annual Debt Service			
	2008 ¹	2008-2012	2013-2017	2018-2022
GO BONDS				
Existing G.O. Bonds ²	\$1.5	\$7.2	\$3.4	\$0.0
General Airport Revenue Bonds ³				
Prior GARB Bonds	16.9	81.1	73.6	66.4
Future GARBS ⁴				
Series 2009 Bonds	0.0	13.4	18.4	18.4
Series 2010 Bonds	0.0	16.9	109.8	109.8
Series 2015 Bonds	0.0	0.0	21.5	92.9
Series 2017 Bonds	0.0	0.0	1.5	64.7
Series 2020 Bonds	0.0	0.0	0.0	67.0
Total GARBS	\$16.9	\$111.4	\$224.9	\$419.2
Total Debt Service	\$18.4	\$118.7	\$228.2	\$419.2
Cost Center Allocation				
Terminal	\$17.3	\$113.2	\$201.4	\$326.7
Airfield	0.8	4.6	22.7	85.2
Apron	0.2	0.8	4.1	7.2
Total Debt Service	\$18.4	\$118.7	\$228.2	\$419.2

¹ CY 2008 Budget provided by MKE staff.

² Excludes GO bond debt service paid with PFCs because the corresponding PFCs are not included in Airport System Revenues.

³ Includes GARB debt service paid with PFCs because the corresponding PFCs are included in Airport System Revenues.

⁴ Debt Service on future GARB issues reflects the Airport System's most recent Master Plan CIP and is projected in order to include the best available information in the financial analysis. The most recent CIP funding plan assumes that additional bonds will be sold in 2009, 2010, 2015, 2017 and 2020. Debt service for Future GARBS in 2009, 2015, and 2020 reflects capitalized interest for 2 years. Debt service for the Future GARB in 2010 reflects capitalized interest for 3 years. Debt service for the Future GARB in 2017 reflects capitalized interest for 5 years. All debt service projections assume a 25-year bond amortization period, 6.0% annual interest and 2% cost of issuance.

9.7 *Projected Airline Rates and Charges*

The Airport's current AUA is scheduled to expire September 30, 2010. As previously discussed in this chapter the current rate methodology is a cost center residual, which means that the Airport's intent is to offset all Airport System revenues against the various airline cost centers in determining the annual rates and charges. During the initial projection of the impact of the CIP on the rates and charges, it became clear that maintaining the current methodology would result in the terminal cost center showing a net surplus in several years due to the projected increase in non-airline revenue credits growing at a faster rate than the terminal expenses. To this end, we have assumed that the Airport management and the airlines will retain the existing residual methodology in the new AUA and make the following adjustment to the current allocation by assuming a portion of the non-airline revenue credits, net of related O&M expenses, will be reallocated to the airfield cost center. All projections discussed below are based on this assumption.

Table 9.7-1 summarizes the net deficit from operating the Airfield and provides a summary of the average projected landing fees for the each phase of the planning period. The landing fees are projected to increase from an average landing fee of \$1.63 in Phase I to \$2.97 in Phase III. The landing fee rates range from a low of \$0.43 in 2020 to a high of \$10.39 in CY 2022. The lower landing fee in 2020 is due to reallocating a portion of the net revenue credits from the terminal cost center based on the assumption noted above. The specifics of the calculation will be further discussed below in the terminal rate calculation. The higher landing fee rate is primarily due to the completion of the new runway.

The average landing fee rates noted on Table 9.7-1 are all proportionately lower after CY 2009 due to the assumed change in the allocation of net non-airline revenue credits. The aggregate amounts that were determined to be available for transfer to the airfield cost center (the public parking net) are shown on this table under credits.

TABLE 9.7-1
MILWAUKEE COUNTY AIRPORT SYSTEM
PROJECTED AVERAGE LANDING FEE
FOR CALENDAR YEARS 2008 - 2022
(\$ In Millions) ⁴

Landing Fee Calculation	Projected Average Landing Fee Costs				Avg. Annual Growth Rate	Avg. Annual Growth Rate	Avg. Annual Growth Rate	Avg. Annual Growth Rate
	2008 ²	2008-2012	2013-2017	2018-2022	2008-2012	2013-2017	2018-2022	2008-2022
Airfield Expenses								
O&M Expense	\$17.0	\$90.8	\$111.7	\$131.7	3.7%	3.3%	6.8%	4.4%
Depreciation	-0.6	0.8	1.1	0.7		-10.0%	-10.0%	n.a.
Prior GARB Bonds	0.1	0.3						
Future GARBs:								
Series 2009 Bonds	0.0	1.1	2.8	2.8				
Series 2010 Bonds	0.0	0.0	18.2	18.2				
Series 2015 Bonds	0.0	0.0	0.1	0.7				
Series 2017 Bonds	0.0	0.0	0.0	49.7				
Series 2020 Bonds	0.0	0.0	0.0	13.8				
Depreciation and Debt Service	(0.5)	2.2	22.6	86.2		0.3%	96.4%	n.a.
Deposits to Coverage Fund	0.0	0.1	0.9	0.0				
Deposits to O&M Reserve Fund	0.0	0.4	1.0	1.3				
Total Airfield Expense	\$16.4	\$93.6	\$136.2	\$219.2	6.0%	1.9%	36.7%	13.8%
Less Credits:								
General Aviation Revenues	\$1.1	\$5.9	\$6.7	\$7.6	2.2%	2.5%	3.1%	2.6%
Air Cargo Rentals	0.2	1.0	1.0	1.0	0.8%	0.8%	0.8%	0.8%
Public Parking (Net) ¹	0.0	27.7	31.8	74.3				
Military Landing Fees	0.1	0.5	0.6	0.7	2.2%	2.5%	3.1%	2.6%
Other Non-Airline Revenue	0.8	4.0	4.1	4.6	-1.5%	2.5%	3.1%	1.5%
Total Credits	2.2	39.1	44.2	88.3	52.1%	-7.1%	-30.2%	2.1%
Airfield Net Deficit	14.2	54.5	92.1	131.0	-11.3%	3.1%	56.7%	14.7%
Total Landed Weight (1,000 lbs)	6.4	33.5	38.4	44.1	2.6%	2.8%	2.9%	2.8%
Average Signatory Landing Fee Rate ³	\$2.24	\$1.63	\$2.40	\$2.97	-13.6%	0.3%	52.4%	11.6%

¹ Represents net public parking revenues (gross revenues reduced by a proportionate amount of roads and grounds expense) transferred from the Terminal Cost Center.

² CY 2008 Budget provided by MKE staff.

³ Represents the average landing fee for each period, except for CY 2008.

⁴ Except for the signatory landing fee rate, which is the whole dollars per thousand lbs of landed weight.

The Terminal rental rates are summarized on **Table 9.7-2**. The average Terminal rental rates are projected to increase from \$18.44 per ERU in CY 2008 or an average rate for Phase I of \$16.05 per ERU to an average rate for Phase III of \$74.11 per ERU. The Terminal rental rate ranges from a low of \$7.62 per ERU in CY 2009 to a high of \$144.92 per ERU in CY 2022. The low rate is primarily the result of the higher non-airline credits, which results in a lower terminal deficit, which would exist under the current AUA. In contrast, the higher rate in CY 2022 is the result of an increase in terminal requirement primarily due to a sharp increase in annual Debt Service resulting from the completion of the terminal and public parking master plan projects. In general, the average terminal rates are higher than historical trends due to the proposed change in reallocation of a portion of the non-airline revenue credits and the completion of the terminal and public parking master plan projects. The adjustment in the non-airline credits was calculated based on the following assumptions:

1. A minimum terminal rate beginning in 2010 based on the most recent historical trends.
2. All excess non-airline credits could be used to offset airfield expense to arrive at a lower landing fee.
3. A level terminal rate consistent with the amount of total terminal expense anticipated during a specific period.

TABLE 9.7-2
MILWAUKEE COUNTY AIRPORT SYSTEM
PROJECTED AVERAGE TERMINAL RENTAL FEE
FOR CALENDAR YEARS 2008 - 2022
(\$ In Millions) ⁵

Terminal Rental Fee Calculation	Projected Average Terminal Fee				Avg. Annual Growth Rate	Avg. Annual Growth Rate	Avg. Annual Growth Rate	Avg. Annual Growth Rate
	2008 ¹	2008-2012	2013-2017	2018-2022	2008-2012	2013-2017	2018-2022	2008-2022
Terminal Expenses								
O&M Expense	\$31.3	\$141.2	\$233.2	\$328.7	5.8%	8.6%	7.6%	6.8%
Prior GARB Bonds	9.9	37.1	37.3	28.6	-2.7%	-7.0%	-4.1%	-4.4%
Future GARBS:								
Series 2009 Bonds	0.0	0.2	0.6	0.6				
Series 2010 Bonds	0.0	0.0	59.9	59.9				
Series 2015 Bonds	0.0	0.0	17.0	84.9				
Series 2017 Bonds	0.0	0.0	0.0	7.4				
Series 2020 Bonds	0.0	0.0	0.0	42.7				
Depreciation	2.5	8.2	6.5	3.8	-8.6%	-10.0%	-10.0%	-9.6%
Capital Cost Recovery	2.0	3.1	0.0	1.0				
Depreciation and Debt Service ²	14.4	48.6	121.2	228.8	-7.0%	13.2%	24.2%	13.6%
Deposits to Coverage Fund	0.0	0.0	7.2	0.0				
Deposits to O&M Reserve Fund	0.3	1.7	4.3	5.4	42.9%	45.5%	48.7%	17.0%
Total Terminal Expense	\$46.0	\$191.5	\$365.9	\$562.9	2.6%	10.5%	15.1%	9.6%
Less Credits:								
Other Charges and Fees	\$0.5	\$2.3	\$3.4	\$4.1	5.1%	3.7%	3.7%	4.1%
Concessions								
Car Rental Concessions	\$7.6	\$35.6	\$59.5	\$81.5	6.3%	6.9%	5.8%	6.4%
Gifts & Novelty	1.5	7.7	15.4	\$22.5	9.4%	6.9%	6.9%	9.3%
Food & Beverage	2.0	11.6	20.4	31.8	14.2%	6.9%	10.7%	10.4%
Public Parking	26.3	129.4	239.8	363.2	7.9%	8.6%	9.1%	8.8%
Net adjustment to Parking Revenues ³		-27.7	-31.8	-74.3	n.a.	n.a.	n.a.	n.a.
Other Terminal Revenues	4.5	19.8	30.0	37.5	4.1%	4.5%	4.7%	4.4%
Total Credits	\$42.3	\$178.8	\$336.6	\$466.4	2.7%	8.2%	11.4%	8.1%
Terminal Net Deficit	\$3.7	\$16.4	\$29.3	\$96.5	1.8%	35.6%	32.1%	18.7%
Forecast Equivalent Rental Units	200,640	1,023,351	1,129,258	1,302,111	2.4%	2.7%	3.5%	2.5%
Projected Average Terminal Rental Fee ⁴	\$18.44	\$16.05	\$25.96	\$74.11	-0.6%	31.9%	27.7%	15.9%

¹ CY 2008 Budget provided by MKE staff.

² Debt service is charged for the Series 2000A and Series 2003A Bonds, and for the portions of the Series 2004A, Series 2005A, 2005B, and 2006B Bond debt service, as well as debt service for future anticipated bond issues, that will not be paid with PFCs.

³ Represents the total adjustments to parking revenues based on maintaining terminal rates at a predetermined level.

⁴ Represents an average rate for the period, except for CY 2008.

⁵ Except for the terminal rental fee, which is the whole dollars per equivalent unit.

Finally, the average Apron rates for each planning phase are shown on **Table 9.7-3**. During the forecast period there are five (5) apron projects scheduled to be completed, which will add approximately 2,860 linear feet at MKE. The resulting impact on the average apron fee is projected to change from \$256.64 per linear foot during Phase I to an average of \$556.45 per linear foot during Phase III. The range in price per linear foot during the master plan period is \$227.11 in CY 2008 to a high of \$943.68 in CY 2022, following the full completion of all apron projects scheduled during this period.

TABLE 9.7-3
MILWAUKEE COUNTY AIRPORT SYSTEM
PROJECTED AVERAGE APRON FEE
FOR CALENDAR YEARS 2008 - 2022
(\$ In Millions) ³

Apron Fee Calculation	Projected Airline Apron fees				Avg. Annual Growth Rate	Avg. Annual Growth Rate	Avg. Annual Growth Rate	Avg. Annual Growth Rate
	2008 ¹	2008-2012	2013-2017	2018-2022	2008-2012	2013-2017	2018-2022	2008-2022
Apron Expenses								
O&M Expense	\$1.4	\$6.6	\$10.2	\$13.1	7.9%	3.2%	8.6%	6.0%
Depreciation	0.1	0.2	0.3	0.3	0.0%	0.0%	0.0%	0.0%
Prior GARB Bonds	0.0	0.2	0.2	0.1	n.a.	-18.7%	n.a.	n.a.
Future GARB Bonds		0.0	3.5	6.7	n.a.	n.a.	53.7%	n.a.
Depreciation and Debt Service	0.1	0.4	4.0	7.1	18.1%	-0.9%	50.5%	36.1%
Deposits to Coverage Fund	0.0	0.0	0.0	1.0				
Deposit to O&M Reserve	0.0	0.1	0.1	0.2	n.a.	3.4%	6.9%	n.a.
Total Apron Expense	\$1.4	\$7.1	\$14.3	\$21.5	8.4%	2.0%	27.9%	13.2%
Less:								
Non-Airline Credits	\$0.2	\$0.6	\$0.6	\$0.6	-4.2%	-5.9%	4.1%	-1.6%
Apron Net Deficit	\$1.3	\$7.8	\$13.7	\$20.9	9.6%	2.4%	28.5%	14.0%
Linear Feet	5,648	30,400	33,640	37,200				
Average Apron Fee ²	\$227.11	\$256.64	\$401.31	\$556.45	4.9%	2.4%	21.2%	10.7%

¹ CY 2008 Budget provided by MKE staff.

² Apron fees represent an average for specified period, except for CY 2008.

³ Except for the apron fee, which is the whole dollars per linear feet unit.

Table 9.7-4 shows the projected cost per enplanement resulting from the proposed CIP including the master plan projects. The cost is projected to fluctuate from \$5.07 in CY 2008 to \$21.75 per enplanement in CY 2022. The cost projected after completion of the CIP during CY 2022 in today's dollars would equal approximately \$14.11.

TABLE 9.7-4
MILWAUKEE COUNTY AIRPORT SYSTEM
PROJECTED AIRLINE COST PER ENPLANED PASSENGER
FOR CALENDAR YEARS 2008 - 2022
(in millions)

Year	Landing Fees ¹	Terminal Rents & Charges	Apron Fees	Total Airline Payments ²	Enplaned Passengers	Cost Per Enplaned Passenger
2008	\$15.0	\$3.7	\$1.3	\$20.0	4.0	\$5.07
2009	\$16.5	\$1.5	\$1.4	\$19.4	4.1	\$4.71
2010	\$9.1	\$3.6	\$1.5	\$14.2	4.3	\$3.33
2011	\$7.7	\$3.6	\$1.8	\$13.1	4.4	\$2.96
2012	\$9.2	\$4.0	\$1.9	\$15.0	4.6	\$3.27
2013	\$23.2	\$4.0	\$2.6	\$29.8	4.8	\$6.24
2014	\$16.3	\$4.0	\$2.7	\$23.0	5.0	\$4.64
2015	\$16.3	\$4.0	\$2.7	\$23.0	5.1	\$4.48
2016	\$12.9	\$4.0	\$2.8	\$19.7	5.3	\$3.69
2017	\$25.8	\$13.4	\$2.9	\$42.0	5.5	\$7.59
2018	\$16.2	\$13.4	\$2.9	\$32.6	5.8	\$5.67
2019	\$8.2	\$13.4	\$3.0	\$24.6	6.0	\$4.12
2020	\$3.7	\$13.4	\$3.1	\$20.2	6.2	\$3.27
2021	\$6.0	\$15.4	\$3.9	\$25.2	6.4	\$3.92
2022	\$96.2	\$40.9	\$8.0	\$145.1	6.7	\$21.75
Average Annual Growth:						
Phase I (2008 -2012)	-11.5%	1.8%	9.6%	-6.9%	3.9%	-10.4%
Phase II (2013 -2017)	2.6%	35.6%	2.4%	9.0%	3.8%	5.0%
Phase III (2018 -2022)	56.0%	24.9%	22.8%	28.1%	3.8%	23.4%
Total (2008 -2022)	14.2%	18.7%	14.0%	15.2%	3.8%	11.0%

¹ Exclude landing fees paid by cargo carriers and military aircraft.

² Airline payments projected based on amounts to be included in the airline rate base, which exclude debt service costs paid with PFCs.

9.8 *Projected Annual Discretionary Cash Flow and Debt Service Coverage*

Table 9.8-1 shows the impact on MKE's average annual net discretionary cash flow and debt service coverage resulting from the full implementation of the CIP. The annual net discretionary cash flow fluctuates between a low of \$0.4 million in CY 2008 and a total of \$10.8 million in Phase I, \$20.0 million in Phase II to a high of \$30.0 million in Phase III. The annual debt service coverage for CY 2008 is budgeted to be 1.49 with the average annual debt service coverage for each phase ranging from a low of 1.33 to a high of 1.49 and is projected to consistently exceed the current debt service coverage requirement of 1.25 throughout the forecast period.

TABLE 9.8-1
MILWAUKEE COUNTY AIRPORT SYSTEM
CASH FLOW AND AVERAGE DEBT SERVICE COVERAGE
FOR CALENDAR YEARS 2008 - 2022
(In Millions)

Cash Flow and Debt Service Coverage	Cash Flow and Average Debt Service Coverage			
	2008 ¹	2008-2012	2013-2017	2018-2022
AIRPORT SYSTEM REVENUES ²				
TOTAL REVENUES	\$73.0	\$418.1	\$627.4	\$942.1
O&M EXPENSES	\$52.1	\$281.2	\$367.3	\$487.7
NET REVENUES	\$21.0	\$136.8	\$260.1	\$454.4
NET DISCRETIONARY CASH FLOW				
Net Revenues	\$21.0	\$136.8	\$260.1	\$454.4
Less: Debt Service				
G.O. Bonds	\$1.5	\$7.2	\$3.4	\$0.0
Prior GARB Bonds	16.9	81.1	73.6	66.4
Future GARBS:				
Series 2009 Bonds	0.0	13.4	18.4	18.4
Series 2010 Bonds	0.0	16.9	109.8	109.8
Series 2015 Bonds	0.0	0.0	21.5	92.9
Series 2017 Bonds	0.0	0.0	1.5	64.7
Series 2020 Bonds	0.0	0.0	0.0	67.0
Less: Deposits to O&M Reserve Fund	0.3	2.1	3.6	5.2
Less: Deposits to Coverage Fund ³	0.0	0.2	8.4	0.0
Less: Reimbursement of Tax Levy	2.0	5.1	0.0	0.0
Net Discretionary Cash Flow	\$0.4	\$10.8	\$20.0	\$30.0
COVERAGE CALCULATION ⁴				
Net Revenues	\$21.0	\$136.8	\$260.1	\$454.4
Add Other Available Funds:				
Prior GARB Bonds	4.2	20.3	18.4	16.6
Future GARBS:				
Series 2009 Bonds	0.0	3.4	4.6	4.6
Series 2010 Bonds	0.0	4.2	27.5	27.5
Series 2015 Bonds	0.0	0.0	5.4	23.2
Series 2017 Bonds	0.0	0.0	0.4	16.2
Series 2020 Bonds	0.0	0.0	0.0	16.7
Net Revenues plus Other Available Funds	\$25.2	\$164.7	\$316.3	\$559.1
Debt Service:				
Prior GARB Bonds	16.9	81.1	73.6	66.4
Future GARBS:				
Series 2009 Bonds	0.0	13.4	18.4	18.4
Series 2010 Bonds	0.0	16.9	109.8	109.8
Series 2015 Bonds	0.0	0.0	21.5	92.9
Series 2017 Bonds	0.0	0.0	1.5	64.7
Series 2020 Bonds	0.0	0.0	0.0	67.0
Total GARB Debt Service	\$16.9	\$111.4	\$224.9	\$419.2
AVERAGE DEBT SERVICE COVERAGE ⁵	1.49	1.48	1.41	1.33

¹ CY 2008 Budget provided by MKE staff.

² In the Supplemental Resolutions for the Series 2004A, 2005A, 2005B, 2006A and 2006B Bonds, PFC revenues are pledged to the payment of those bonds to the extent that the projects funded with the bond proceeds are approved for PFC funding. Therefore, PFCs projected to be used to pay debt service on those bonds are included in Airport System Revenues. Projected PFC revenues shown on this table also include PFCs anticipated to be used to pay debt service on two future bond issues projected during the forecast period.

³ Increases to the Coverage Fund Balance not funded with PFCs.

⁴ Debt service coverage is calculated as Airport System Revenues (including PFCs pledged for debt service), plus other Available Funds, divided by annual GARB debt service. Other Available Funds, as defined in the Bond Resolution, include amounts on deposit in the Coverage Fund and the Surplus Fund. However, Other Available Funds included in the debt service coverage calculation shall not exceed 25% of annual debt service costs.

⁵ Debt service coverage represents an average for the specified period, except for CY 2008.

9.9 *Rate Methodology Alternatives for New Airline Use and Lease Agreements*

Unison reviewed several AUAs from other airports in an effort to identify some of the more recent trends pertaining to AUAs. The results of this review identified the following trends that should be considered by the Airport:

1. Term of the AUA – The more recent AUAs tend to have shorter lease periods. This trend seems to provide both the airport operators and the airlines more flexibility to manage and react to the many uncertainties of the industry.
2. Pre-funded CIP – Allows for the airport operator and the airlines to agree on a multi-year CIP as a condition to the AUA.
3. Establish fund liquidity – AUAs are beginning to include provisions which provide assurances that the rate methodology will produce adequate liquidity levels. This matter is becoming increasingly important to the rating process.
4. Establish discretionary funds – This fund is established at airports to allow the airport operator additional flexibility to address emergencies without relying on external funding sources. This is a typical designated use of the funds.

As with any airport, the AUA has to be tailored to meet the specific needs of that airport.