MARSHALL & ILSLEY CORP/WI/
Form 11-K
June 29, 2007

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 11-K

(Mark One)

[X] ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2006

OR

[ ] TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from __________ to __________

Commission file number 1-15403

A. Full title of the plan and the address of the plan, if different from that of the Issuer named below:

Missouri State Bank & Trust Company Retirement Savings Plan

B. Name of the issuer of the securities held pursuant to the plan and the address of its principal executive office:

MARSHALL & ILSLEY CORPORATION
770 North Water Street
Milwaukee, Wisconsin 53202

Financial Statement and Exhibits

(a) Financial Statements:

Missouri State Bank & Trust Company Retirement Savings Plan

Report of Independent Registered Public Accounting Firm.
Statements of Net Assets Available for Benefits as of December 31, 2006 and 2005.
Statements of Changes in Net Assets Available for Benefits for the Year Ended December 31, 2006.
Notes to Financial Statements as of December 31, 2006 and 2005 and for the Year Ended December 31, 2006.
Supplemental Schedule, Form 5500, Schedule H, Part IV, Line 4(i)
Schedule of Assets (Held at End of Year) as of December 31, 2006.

(b) Exhibits:

23 Consent of Independent Registered Public Accounting Firm - Deloitte & Touche LLP

Missouri State Bank & Trust Company Retirement Savings Plan

Financial Statements as of December 31, 2006
and for the Year Ended December 31, 2006,
Supplemental Schedule as of December 31, 2006,
and Report of Independent Registered Public Accounting Firm

MISSOURI STATE BANK & TRUST COMPANY RETIREMENT SAVINGS PLAN

TABLE OF CONTENTS

NOTE: All other schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.

[Deloitte & Touche LLP Letterhead]

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Trustee and Participants of the
Missouri State Bank & Trust Company Retirement Savings Plan:

We have audited the accompanying statements of net assets available for benefits of the Missouri State Bank & Trust Company Retirement Savings Plan (the "Plan") as of December 31, 2006 and 2005, and the related statement of changes in net assets available for benefits for the year ended December

31, 2006. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2006 and 2005, and the changes in net assets available for benefits for the year ended December 31, 2006, in conformity with accounting principles generally accepted in the United States of America.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets (held at end of year) as of December 31, 2006, is presented for the purpose of additional analysis and is not a required part of the basic financial statements, but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This schedule is the responsibility of the Plan's management. Such schedule has been subjected to the auditing procedures applied in our audit of the basic 2006 financial statements and, in our opinion, is fairly stated in all material respects when considered in relation to the basic 2006 financial statements taken as a whole.

/s/ Deloitte & Touche

Milwaukee, Wisconsin
June 22, 2007

2

MISSOURI STATE BANK & TRUST COMPANY RETIREMENT SAVINGS PLAN

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
AS OF DECEMBER 31, 2006 AND 2005

	2006	2005
ASSETS:		
Investments -- at fair value:		
Master Trusts	$ 833,030	$ --
Investments	2,333,878	3,253,134

Loans to participants	11,735	21,848
Total investments	3,178,643	3,274,982
RECEIVABLES:		
Employer contribution	--	16,692
Employee contributions	--	5,825
Accrued investment income	1,304	--
Total receivables	1,304	22,517
Total assets	3,179,947	3,297,499
LIABILITIES -- Payables -- pending trades	1,535	--
NET ASSETS AVAILABLE FOR BENEFITS AT FAIR VALUE	3,178,412	3,297,499
Adjustments from fair value to contract value for fully benefit-responsive investment contacts	2,992	--
NET ASSETS AVAILABLE FOR BENEFITS	$ 3,181,404	$ 3,297,499

See notes to financial statements.

3

MISSOURI STATE BANK & TRUST COMPANY RETIREMENT SAVINGS PLAN

STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
FOR THE YEAR ENDED DECEMBER 31, 2006

CONTRIBUTIONS:	
Participants	$ 163,108
Employer	38,764
Participant rollovers	1,783
Total contributions	203,655
INVESTMENT INCOME:	
Income from Master Trusts	68,457
Net appreciation of fair value of investments	328,495
Interest	17,245
Net investment income	414,197
DEDUCTIONS:	
Benefits paid to participants	(732,345)
Administrative expenses	(1,602)
Total deductions	(733,947)
NET DECREASE IN ASSETS AVAILABLE FOR BENEFITS	(116,095)

NET ASSETS AVAILABLE FOR BENEFITS:	
Beginning of year	3,297,499
End of year	$ 3,181,404

See notes to financial statements.

MISSOURI STATE BANK & TRUST COMPANY RETIREMENT SAVINGS PLAN

NOTES TO FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2006 AND 2005, AND FOR THE YEAR ENDED DECEMBER 31, 2006

1. DESCRIPTION OF THE PLAN

The following description of the Missouri State Bank & Trust Company Retirement Savings Plan (the "Plan") is provided for general information purposes only. Participants should refer to the Plan document for more complete information.

General -- The Plan is a defined contribution plan covering substantially all salaried employees of Missouri State Bank & Trust Company (the "Company"). Marshall & Ilsley Corporation (the "Corporation") is the administrator of the Plan and Marshall & Ilsley Trust Company (the "Trustee"), a subsidiary of the Corporation, serves as the trustee of the Plan. Prior to the Company's merger with the Corporation, described below, the Company served as administrator and trustee of the Plan. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA).

On April 1, 2006, the Company merged with the Corporation and participants terminated as a direct result of the merger became 100% vested in the Plan. Participants continuing with the Corporation post merger are subject to the vesting schedule of the Plan as described below. The Plan's benefits were frozen as of April 30, 2006.

Effective April 1, 2006, each Plan participant was eligible to make the election to participate in the M&I Retirement Plan, a defined contribution plan which is subject to the provisions of ERISA.

Contributions -- Prior to the Plan being frozen, participants could elect to contribute 1% to 15% of their pretax annual compensation, as defined in the Plan, subject to certain Internal Revenue Code (IRC) limitations. The Company also made discretionary matching contributions equal to a percentage of participants elective deferral contributions. Participants could also contribute amounts representing distributions from other qualified defined benefit or defined contribution plans.

Participant Accounts -- Individual accounts are maintained for each Plan participant. Each participant's account is credited with the participant's contribution, the Company's matching contribution, and an allocation of Plan earnings, and charged with withdrawals and an allocation of Plan losses and administrative expenses. Allocations are based on participant earnings or account balances, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Vesting -- Participants are vested immediately in their contributions plus actual earnings thereon. For participants not 100% vested as a result of the Company merger, vesting in the Company's contributions is based on continuous service. A participant vests 20% each year upon completing two years of service. A participant is 100% vested after completing six years of service.

Forfeitures -- Prior to the Plan being frozen, forfeited nonvested accounts were used to reduce Company contributions. Subsequent to the Plan being frozen, forfeited nonvested accounts were used to pay administrative expenses and then allocated to participants.

5

Investments -- Participants may direct the investment of their contributions into the eighteen investment options offered by the Plan.

Participant Loans -- Participants may borrow from their vested accounts with a minimum of $1,000 up to a maximum of $50,000 or 50% of their account balance, whichever is less. The loans are secured by the balance in the participant's account. Principal and interest are paid ratably through payroll deductions. As of May 1, 2006, the Plan no longer offers new loans to participants. The loans were written with original terms of two to five years. The interest rates were based on prevailing market conditions and are fixed over the life of the note. Interest rates on participant loans at December 31, 2006 and 2005 ranged from 5.25% to 7.50%.

Payment of Benefits -- Participants in the Plan or beneficiaries are eligible to receive a benefit upon their termination, normal retirement date, early retirement date, death, financial hardship, or disability, as defined, equal to the amount in their individual accounts.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting -- The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America.

Use of Estimates -- The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and changes therein and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Risks and Uncertainties -- The Plan utilizes various investment instruments, including mutual funds and a common collective fund. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

Investment Valuation and Income Recognition -- The Plan's investments are stated at fair value except for the Marshall & Ilsley Stable Principal Fund (the "Fund"), which is stated at fair value and then adjusted to contract value. The Fund invests in guaranteed investment contracts. Fully benefit-responsive investment contracts are valued at fair value. Under the terms of the investment contracts, the crediting interest rate is determined semi-annually based on the insurance company's applicable rate schedule. There are no limitations on guarantees of the contracts.

Quoted market prices are used to value investments held by the Plan as well as the underlying investments of the Master Trusts in which the Plan invests. Shares of mutual funds are valued at quoted market prices, which represent the net asset value of shares held by the Plan at year end. Participant loans are valued at the outstanding loan balances.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Management fees and operating expenses charged to the Plan for investments in the mutual funds are deducted from income earned on a daily basis and are not separately reflected. Consequently, management fees and operating expenses are reflected as a reduction of investment return for such investments.

6

Administrative Expenses -- Significantly all administrative expenses of the Plan were paid by the Corporation for the year ended December 31, 2006.

Payment of Benefits -- Benefit payments to participants are recorded upon distribution. There were no amounts allocated to participants who elected to withdraw from the Plan but were not yet paid as of December 31, 2006 and 2005.

Adoption of New Accounting Guidance -- The financial statements reflect the retroactive adoption of Financial Accounting Standards Board Staff Position, FSP AAG INV-1 and SOP 94-4-1, Reporting of Fully Benefit-Responsive Contracts Held by Certain Investment Companies Subject to the AICPA Investment Company Guide and Defined-Contribution Health and Welfare and Pension Plans (the "FSP"). As required by the FSP, the statements of net assets available for benefits presents investment contracts at fair value as well as an additional line item showing an adjustment of fully benefit responsive contracts from fair value to contract value. The statement of changes in net assets available for benefits is presented on a contract value basis and was not affected by the adoption of the FSP.

3. INVESTMENTS

The Plan's investments that represented 5% or more of the Plan's net assets available for benefits as of December 31, 2006 and 2005 are as follows:

	2006	2005
M&I Master Trust --		
Common Stock Fund*	$ 172,216	$ --
M&I Stable Principal Fund*	240,679	--

M&I Master Trust -- Aggressive Stock Fund*	241,075	--
Vanguard Institutional Index Fund	423,755	--
Goldman Sachs Small-Cap Value Fund	211,873	--
Marshall Mid-Cap Value Fund*	252,672	--
Nicholas Fund	188,729	--
Marshall International Stock Fund*	327,127	--
Principal Global Investors Money Market*	--	264,674
Principal Global Investors Bond and Mortgage*	--	390,970
Principal Global Investors Mid-Cap Value I*	--	359,883
Principal Global Investors Large-Cap Blend I*	--	232,635
Principal Global Investors Large Cap Stock Index*	--	498,704
Principal Global Investors Medium Company Blend*	--	284,212
Principal Global Investors Diversified International*	--	315,796

* Represents party-in-interest

During the year ended December 31, 2006, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated in value as follows:

Mutual funds	$ 328,495
Net appreciation in fair value of investments	$ 328,495

4. INTEREST IN MASTER TRUSTS

As of December 31, 2006, certain of the Plan's investment assets are held in trust accounts at the Trustee and consist of undivided interests in investments of the Master Trusts which are established by the Corporation and administered by the Trustee. Use of the Master Trust permits the commingling of trust assets with the assets of the Plan's assets with the assets of the M&I Retirement Plan and the NYCE 401(k) Plan for investment and administrative purposes. Although assets of all three plans are commingled in the Master Trusts, the Trustee maintains supporting records for the purpose of allocating the net gain or loss of the investment account to the participating plans. The net investment income of the investment assets is allocated by the Trustee to each participating plan based on the relationship of the interest of each plan to the total of the interests of the participating plans.

The Plan's investments and income in the Master Trusts at December 31, 2006, are summarized as follows:

M&I Master Trust -- Aggressive Stock Fund

Investments -- whose fair value is determined based on quoted market prices -- mutual funds	$ 116,363,654
Net assets of the M&I Master Trust -- Aggressive Stock Fund	$ 116,363,654
Plan's interest in net assets of the M&I Master Trust -- Aggressive Stock Fund	$ 241,075
Plan's interest in M&I Master Trust -- Aggressive Stock Fund as a percentage of the total	0.21 %

Dividend and interest income	$ 942,819
Net appreciation in the fair value of investments -- mutual funds	14,455,227
Total M&I Master Trust -- Aggressive Stock Fund income	$ 15,398,046

M&I Master Trust -- Growth Balanced Fund

Investments -- whose fair value is determined based on quoted market prices -- mutual funds	$ 127,634,361
Net assets of the M&I Master Trust -- Growth Balanced Fund	$ 127,634,361
Plan's interest in net assets of the M&I Master Trust -- Growth Balanced Fund	$ 142,881
Plan's interest in M&I Master Trust -- Growth Balanced Fund as a percentage of the total	0.11 %

Dividend and interest income	$ 2,724,630
Net appreciation in the fair value of investments --	

mutual funds	10,296,520
Total M&I Master Trust -- Growth Balanced Fund income	$ 13,021,150

M&I Master Trust -- Aggressive Balanced Fund

Investments -- whose fair value is determined based on quoted market prices -- mutual funds	$ 18,624,234
Net assets of the M&I Master Trust -- Aggressive Balanced Fund	$ 18,624,234
Plan's interest in net assets of the M&I Master Trust -- Aggressive Balanced Fund	$ 33,025
Plan's interest in M&I Master Trust -- Aggressive Balanced Fund as a percentage of the total	0.18 %

Dividend and interest income	$ 243,808
Net appreciation in the fair value of investments -- mutual funds	1,610,942
Total M&I Master Trust -- Aggressive Balanced Fund income	$ 1,854,750

M&I Master Trust -- Moderate Balanced Fund

Investments -- whose fair value is determined based on quoted market prices -- mutual funds	$ 8,164,618
Net assets of the M&I Master Trust -- Moderate Balanced Fund	$ 8,164,618
Plan's interest in net assets of the M&I Master Trust --	

Moderate Balanced Fund	$ 149,595
Plan's interest in M&I Master Trust -- Moderate Balanced Fund as a percentage of the total	1.83 %
Dividend and interest income	$ 179,817
Net appreciation in the fair value of investments -- mutual funds	370,800
Total M&I Master Trust -- Moderate Balanced Fund income	$ 550,617

9

M&I Master Trust -- Diversified Stock Fund

Investments -- whose fair value is determined based on quoted market prices -- mutual funds	$ 23,233,811
Net assets of the M&I Master Trust -- Diversified Stock Fund	$ 23,233,811
Plan's interest in net assets of the M&I Master Trust -- Diversified Stock Fund	$ 94,238
Plan's interest in M&I Master Trust -- Diversified Stock Fund as a percentage of the total	0.41 %
Dividend and interest income	$ 227,035
Net appreciation in the fair value of investments -- mutual funds	2,384,163
Total M&I Master Trust -- Diversified Stock Fund income	$ 2,611,198

M&I Master Trust -- Common Stock Fund

Investments -- whose fair value is determined based on quoted market prices -- common stock	$ 483,516,733
Net assets of the M&I Master Trust -- Common Stock Fund	$ 483,516,733
Plan's interest in net assets of the M&I Master Trust -- Common Stock Fund	$ 172,216
Plan's interest in M&I Master Trust -- Common Stock Fund as a percentage of the total	0.04 %

Dividend and interest income	$ 10,761,089
Net appreciation in the fair value of investments -- mutual funds	48,675,405
Total M&I Master Trust -- Common Stock Fund income	$ 59,436,494

At December 31, 2006, the M&I Master Trust -- Common Stock Fund held 10,024,546 shares of common stock of the Corporation, the sponsoring employer, with a cost basis of $142,705,068. During the year ended December 31, 2006, the M&I Master Trust -- Common Stock Fund recorded dividend income of $10,702,171.

5. FEDERAL INCOME TAX STATUS

The Plan is a Non-Standardized Prototype Plan ("Prototype Plan") sponsored by the Trustee and adopted by the Corporation. The Plan has not requested its own determination letter from the Internal Revenue Service. However, the Corporation and Plan administrator believe that the Plan is currently designed and being operated in compliance with the applicable requirements of the Internal Revenue Code and the Plan continues to be tax-exempt. Therefore, no provision for income taxes has been included in the Plan's financial statements.

10

6. EXEMPT PARTY-IN-INTEREST TRANSACTIONS

Certain Plan investments are shares of mutual funds, a common collective fund, and Master Trusts managed by the Trustee. The Corporation is the trustee as defined by the Plan and, therefore, these transactions qualify as exempt party-in-interest transactions. Fees paid by the Plan for investment management services were included as a reduction of the return earned on each fund.

7. PLAN TERMINATION

Although it has not expressed any intention to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions set forth in ERISA. In the event that the Plan is terminated, all participants would be 100% vested in their accounts.

8. RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500

The reconciliation of net assets available for benefits and changes in net assets available for benefits per the financial statements to the Form 5500 as of and for the year ended December 31, 2006, is as follows:

Statement of net assets available for benefits:		
Net assets available for benefits per the financial statements	$	3,181,404
Adjustments from contract value to fair value for fully benefit-responsive investment contracts		(2,992)
Net assets available for benefits per the Form 5500 -- at fair value	$	3,178,412
Statement of changes in net assets available for benefits:		
Decrease in net assets per the financial statements	$	(116,095)
Adjustment from contract value to fair value for fully benefit-responsive investment contracts		(2,992)
Net loss per Form 5500	$	(119,087)

10. SUBSEQUENT EVENT

In early April 2007, the Corporation announced its plan to separate Marshall & Ilsley Corporation and Metavante Corporation into two separate publicly traded companies. This transaction, which is contingent upon satisfaction of various closing conditions, is expected to close in the fourth quarter of 2007. The closing conditions include approval of Marshall & Ilsley Corporation shareholders, who will be asked to vote on the proposed transaction at a special meeting that will be held on a date to be announced, obtaining a favorable ruling from the Internal Revenue Service and other regulatory approvals. The impact of this proposed transaction on the Plan is currently unknown.

* * * * * *

11

SUPPLEMENTAL SCHEDULE

12

MISSOURI STATE BANK & TRUST COMPANY RETIREMENT SAVINGS PLAN

FORM 5500, SCHEDULE H, PART IV, LINE 4i --
SCHEDULE OF ASSETS (HELD AT END OF YEAR)
AS OF DECEMBER 31, 2006

Issuer	Description of Investment, Including Maturity Date, Rate of Interest, Collateral, and Par or Maturity Value	Current Value
M&I Master Trust -- Growth Balanced Fund*	Master Trust	$ 142,881
M&I Stable Principal Fund*	Common Collective Fund	240,679
M&I Master Trust -- Aggressive Balanced Fund*	Master Trust	33,025
Vanguard Institutional Index Fund	Registered Investment Company	423,755
M&I Master Trust -- Moderate Balanced Fund*	Master Trust	149,595
Goldman Sachs Small-Cap Value Fund	Registered Investment Company	211,873
Marshall Mid-Cap Value Fund*	Registered Investment Company	252,672
Nicholas Fund	Registered Investment Company	8,729
Marshall Intermediate Bond Fund*	Registered Investment Company	96,516
Managers Special Equity Fund	Registered Investment Company	107,434
Marshall Mid-Cap Growth Fund*	Registered Investment Company	137,159
Marshall International Stock Fund*	Registered Investment Company	327,127
Marshall Large Cap Value Fund*	Registered Investment Company	147,482
M&I Master Trust -- Diversified Stock Fund*	Master Trust	94,238
M&I Master Trust -- Aggressive Stock Fund*	Master Trust	241,075
MFS Massachusetts Growth Fund	Registered Investment Company	53,505
Marshall Large Cap Growth & Income Fund*	Registered Investment Company	146,947
M&I Master Trust -- Common Stock Fund*	Master Trust	172,216
Various participants*	Participant Loans (at interest rates of 5.25% - 7.50%)	11,735
		$ 3,178,643

* Represents party-in-interest

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed by the undersigned thereunto duly authorized.

Missouri State Bank & Trust
Company Retirement Savings Plan

/s/ Dennis R. Salentine

Dennis R. Salentine
Vice President,and
Director of Corporate
Benefits of the Marshall
& Ilsley Corporation

Date: June 29, 2007