UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

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 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to .

Commission File Number: 1-14100

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

Impac Companies 401(k) Savings Plan

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

Impac Mortgage Holdings, Inc. 19500 Jamboree Road Irvine, CA 92612

Impac Companies 401(k) Savings Plan

Financial Statements and Supplemental Schedule

December 31, 2006 and 2005

(With Independent Registered Public Accounting Firm's Report Thereon)

Impac Companies 401(k) Savings Plan

Index to Financial Statements and Supplemental Schedule

Report of Ernst & Young, LLP, Independent Registered Public Accounting Firm

Statements of Net Assets Available for Benefits - December 31, 2006 and 2005

Statements of Changes in Net Assets Available for Benefits - Years ended December 31, 2006 and 2005

Notes to Financial Statements

Schedule

Schedule H, Line 4i – Schedule of Assets (Held at End of Year) – December 31, 2006

All schedules omitted are not required based on disclosure requirements of the Employee Retirement Income Security Act of 1974 and regulations issued by the Department of Labor.

Report of Independent Registered Public Accounting Firm

Impac as Plan Administrator of the Impac Companies 401(k) Savings Plan

We have audited the accompanying statements of net assets available for benefits of Impac Companies 401(k) Savings Plan as of December 31, 2006 and 2005, and the related statements of changes in net assets available for benefits for the years then ended. 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 the 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. We were not engaged to perform an audit of the Plan's 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, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan at December 31, 2006 and 2005, and the changes in its net assets available for benefits for the years then ended, in conformity with U.S. generally accepted accounting principles.

Our audits were performed for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2006, is presented for purposes of additional analysis and is not a required part of the 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 supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in our audits of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

/s/ Ernst & Young LLP

Irvine, California October 9, 2007

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Impac Companies 401(k) Savings Plan Statements of Net Assets Available for Benefits

December 31, 2006 and 2005 (Note 1)

	2006		2005
Assets			
Noninterest-bearing cash	\$	91,068	\$ 26,992
Investments at fair value:			
Common collective trust		15,333,697	12,794,185
Common stock (Note 1)		4,124,891	3,737,297
Loans to participants		357,207	171,954
Total investments at fair value		19,815,795	16,703,436
Employer contribution receivable		977,143	949,099
Total assets		20,884,006	 17,679,527
Net assets available for benefits	\$	20,884,006	\$ 17,679,527

See accompanying notes to financial statements.

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	2006	2005
Additions (Deductions)	 	,
Contributions:		
Employer (Note 1)	\$ 977,143	\$ 949,099
Participants	3,052,233	2,687,798
	 4,029,376	3,636,897
Net investment income (loss):		
Interest	19,096	10,940
Net appreciation (depreciation) in fair value of investments	1,781,631	(3,862,394)
	 1,800,727	(3,851,454)
Benefits paid to participants	(2,444,260)	(1,436,971)
Administrative expenses	(181,364)	(141,614)
Net increase (decrease) in net assets available for benefits	 3,204,479	(1,793,142)
Net assets available for benefits:		
Beginning of year	17,679,527	19,472,669
End of year (Note 1)	\$ 20,884,006	\$ 17,679,527

See accompanying notes to financial statements.

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Impac Companies 401(k) Savings Plan Notes to Financial Statements December 31, 2006

(1) Description of Plan Sponsor and Plan

The following description of the Impac Companies 401(k) Savings Plan (the Plan), provides only general information. Participants should refer to the Plan Document for a more complete description of the Plan's provisions.

During the third quarter of 2007, Impac Mortgage Holdings Inc. (the Plan Sponsor and Principal Employer) adopted a plan to restructure its operations by exiting certain activities (Mortgage Operations excluding retail originations, Commercial Operations, Warehouse Lending) and severing employees. The restructuring caused the Plan to experience a partial plan termination event, the consequences of which were that those employees who were not 100% vested in their benefits and who terminated in connection with the restructuring, became vested in their employer contributions upon the partial plan termination.

Additionally, subsequent to December 31, 2006, the price of one of the Plan's investments (Impac Mortgage Holdings Common Stock) has declined from \$8.80 per share to \$1.58 on October 9, 2007. The total number and aggregate value of Impac Mortgage Holdings Common Stock in the Plan decreased from 463,625 shares and \$4.1 million as of December 31, 2006, to 370,782 shares and \$586 thousand as of October 9, 2007, respectively.

Management of the Plan does not believe that the financial condition of the Plan Sponsor will significantly impact the Plan Sponsor's ability to meet obligations of the Plan, including making its matching or discretionary contributions. As of October 9, 2007, the Plan Sponsor has made all necessary contributions to the Plan, including the contribution receivable at December 31, 2006. However, there can be no assurance as to how, if at all, the Plan Sponsor's financial condition or actions taken, as a result of its financial condition, will impact the plan.

(a) General

The Plan is a defined contribution plan covering all eligible employees of Impac Mortgage Holdings, Inc. and its affiliated companies. Employees become eligible for participation in the Plan upon 6 months of employment. Participants must be employed on the last day of the Plan year to share in the employer's matching contribution. In order to become a participant, each eligible employee authorizes contributions by filing a 401(k) enrollment/change of status election. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

Prior to January 1, 2001, the Principal Employer and its affiliated companies participated in the Imperial Credit Industries, Inc. Salary Investment Plan (the Prior Plan) for the benefit of its employees.

Effective January 1, 2001, the portion of the Prior Plan attributable to the employees of the Principal Employer and its affiliated companies was amended and restated as a separate Plan. The terms of the Plan are set forth and intended to continue to qualify as a profit sharing trust which meets the qualification and tax exemption requirements of Section 401(a) and 501(a) of the Internal Revenue Code of 1986, as amended, and any other provisions of applicable law.

(b) Contributions

No contribution is required by the Principal Employer; however, at the discretion of its board of directors, the Principal Employer may contribute out of its income and/or accumulated earned surplus an amount equal to a specified percentage of the tax-deferred contribution of the participants or a profit sharing contribution with the amount to be determined by the board of directors. The maximum annual participant contribution is 25% and 7% for "non-highly compensated" employees and "highly compensated" employees, respectively. For 2006 and 2005, the Principal Employer chose to match the participants' contributions at a rate of 50% of the portion of the Participants' Elective Contribution not in excess of 4% of compensation. In addition, the Principal Employer elected to make additional discretionary matches of \$350,000 for 2006 and 2005.

(c) Participant Accounts

(d) Participant Loans

Participants may borrow from their fund accounts a minimum of \$1,000 up to a maximum equal to the lesser of \$50,000 reduced by the highest outstanding loan balance during the preceding 12 months or 50% of their vested account balance. Loan repayments are to be made over a period not to exceed 5 years, except loans for the purchase of a primary residence in which case payment may exceed 5 years. The loans are secured by the balance in the participant's account and bear interest at a rate of prime plus 1%. Principal and interest are paid ratably through payroll deductions.

(e) Vesting

Participation in the Plan is voluntary. Employee contributions and the earnings as a result of each participant's contributions are 100% vested and nonforfeitable. The Principal Employer's basic matching contributions are 100% vested and nonforfeitable. The Principal Employer's discretionary match shall become 100% vested after 3 years of service, on the participant's attaining age 65, or on the participant's death or total and permanent disablement.

(f) Payment of Benefits

On termination of service, a participant may elect to receive either a lump-sum amount equal to the vested balance of his or her account or annual (or more frequent) installments over a period not to exceed the life expectancy of the participant.

(g) Forfeited Accounts

Under the terms of the Plan, forfeitures shall be used to reduce future employer contributions or to defray the expenses of the Plan. At December 31, 2006 and 2005, forfeited nonvested accounts totaled \$79,671 and \$27,258 respectively. The amount forfeited during the years ended December 31, 2006 and 2005 totaled \$80,289 and \$38,445, respectively.

(2) Summary of Significant Accounting Policies

(a) Basis of Presentation

The accompanying financial statements have been prepared on the accrual basis of accounting. Certain reclassification entries have been made to the 2005 financial statements to conform to the 2006 presentation.

(b) Trust Fund Managed by Investment Advisory Committee

Under the terms of the Plan, the assets of the Plan are placed in trust with UBS Fiduciary Trust Company (the Trust), and are held by Mellon Trust, custodian. Assets are managed under the direction of Employee Compensation and Benefits Committee of the Principal Employer's board of directors (the Committee). The Committee has delegated certain of its ordinary management and investment responsibilities to certain members of the Principal Employer's Executive Committee and the Vice President of Human Resources. Committee members are appointed for an indefinite term by the Principal Employer's board of directors. The Committee has full discretionary authority to administer the Plan and the trust agreement.

(c) Allocation of Plan Assets

Employee contributions are allocated to various funds based on the election made by each participant. Net income or loss of each fund is allocated on the basis of the proportionate asset balance of each participant as of the previous valuation date after adjustment for withdrawals, distributions, and other additions or subtractions that may be appropriate. Under the daily valuation record-keeping system, earnings are allocated on the basis of current shares held in each participant's account and the accounts are valued daily.

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(d) Disclosure about Fair Value of Financial Instruments

The Plan's financial instruments are carried at fair value or amounts approximating fair value. The investments and changes therein of common/collective trust funds are reported as determined by UBS, at fair values based upon quotations obtained from national securities exchanges and latest bid prices for underlying securities and discounted cash flows for underlying investment contracts. Participant loans are carried at their outstanding balance which approximates fair value. Security transactions are accounted for on a trade-date basis. Realized gains and losses on the sale of investments are computed using the average cost method.

In December 2005, the Financial Accounting Standards Board (FASB) issued FASB Staff Position AAG INV-1 and SOP 94-4-1, *Reporting of Fully Benefit-Responsive Investment Contracts Held by Certain Investment Companies Subject to the AICPA Investment Company Guide and Defined-Contribution Health and Welfare and Pension Plans* (the FSP). The FSP defines the circumstances in which an investment contract is considered fully benefit responsive and provides certain reporting and disclosure requirements for fully benefit responsive investment contracts in defined contribution health and welfare and pension plans. The financial statement presentation and disclosure provisions of the FSP are effective for financial statements issued for annual periods ending after December 15, 2006 and are required to be applied retroactively to all prior periods presented for comparative purposes. The Plan has adopted the provisions of the FSP at December 31, 2006. The UBS Guaranteed Investment Contract (GIC) Portfolio held by the Plan holds GICs and/or synthetic GICs which are subject to the FSP. Adoption of the FSP had an immaterial impact on the financial statements as the contract values approximate estimated fair values.

(e) Use of Estimates

Certain estimates and assumptions have been made relating to the reporting of Plan assets, liabilities and changes in related net assets to prepare the financial statements in conformity with U.S. generally accepted accounting principles. Actual results could differ from those estimates.

(f) Administrative Expenses

All administrative expenses of the Plan are paid directly by the Principal Employer.

(g) Risks and Uncertainties

The Plan provides for various investment options including mutual funds and common stock. Investments are exposed to various risks such as interest rate, market, and credit. Due to the level of uncertainty related to changes in the value of investments, it is at least reasonably possible that changes in various risk factors in the near term could materially affect participants' account balances and the amounts reported in the financial statements.

(h) Concentration

The Plan's investment in Impac Mortgage Holdings, Inc. common stock comprises 21% and 23% of its net assets as of December 31, 2006 and 2005, respectively.

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(3) Investments

The following table presents the fair values of investments at December 31, 2006 and 2005, which represent 5% or more of the Plan's net assets.

	December 31,			
Identity of party and description of asset		2006		2005
Common Stock:				
Impac Mortgage Holdings, Inc.	\$	4,124,891	\$	3,737,297
Common Collective Trusts:				
UBS Large Company Value Portfolio		2,508,758		2,007,948
UBS GIC Portfolio		2,253,366		2,128,364
UBS Large Company Growth Portfolio		2,100,723		1,287,952
UBS International Core Portfolio		1,776,099		1,047,570
UBS Mid-Cap Value Portfolio		1,507,612		1,223,938
UBS Growth Value Portfolio		1,474,762		1,136,832
UBS US Tactical Allocation Portfolio		1,265,262		1,270,358
UBS Fixed Income Index Portfolio		1,215,026		1,714,153
UBS Small Company Growth Portfolio		1,132,659		977,070

During 2006 and 2005, the Plan's common collective trusts (including gains and losses on investments bought and sold, as well as held during the year) appreciated in value by \$1,472,502 and \$649,518, respectively, and the Plan's common stock changed in value by \$127,765 and \$(4,653,526), respectively.

(4) Plan Termination

Although the Principal Employer has not expressed any intent to terminate the Plan, it may do so at any time subject to the provisions of ERISA. In the event the Plan is terminated, all participants became 100% vested in their account balances. As previously stated in Note 1, a partial plan termination occurred and affected participants became 100% vested in their accounts.

(5) Federal Income Taxes

The Plan has received a determination letter from the Internal Revenue Service dated April 10, 2003, stating that the Plan is qualified under Section 401(a) of the Internal Revenue Code (the "Code") and, therefore, the related trust is exempt from taxation. Subsequent to this determination by the Internal Revenue Service, the Plan was amended. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualification. The plan administrator believes the Plan is being operated in compliance with the applicable requirements of the Code and, therefore, believes that the Plan, as amended, is qualified and the related trust is tax exempt.

(6) Related Party Transactions

The Plan held 463,625 and 396,888 shares of common stock of Impac Mortgage Holdings, Inc., the Principal Employer, at December 31, 2006 and 2005, respectively.

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Identity of issuer, borrower, lessor, or similar party	of interest, collateral, par, or maturity value	Cost	Current value	
*Impac Mortgage Holdings Common Stock	Common Stock 463,625 shares	**	\$	4,124,891
*UBS Large Company Value Portfolio	Common Collective Trust 31,319 units	**		2,508,758
*UBS GIC Portfolio	Common Collective Trust 71,366 units	**		2,253,366
*UBS Large Domestic Growth Portfolio	Common Collective Trust 395,541 units	**		2,100,723
*UBS International Core Portfolio	Common Collective Trust 89,336 units	**		1,776,099
*UBS Mid-Cap Value Portfolio	Common Collective Trust 34,960 units	**		1,507,612
*UBS Growth Value Portfolio	Common Collective Trust 25,105 units	**		1,474,762
*UBS Tactical Allocation Portfolio	Common Collective Trust 99,871units	**		1,265,262
*UBS Fixed Income Index Portfolio	Common Collective Trust 78,009 units	**		1,215,026
*UBS Small Company Growth Portfolio	Common Collective Trust 11,547 units	**		1,132,659
*UBS Strategic Bond Portfolio	Common Collective Trust 1,233 units	**		29,628
*UBS International Growth Portfolio	Common Collective Trust 1,295 units	**		26,198
*UBS International Value Portfolio	Common Collective Trust 608 units	**		14,514
*UBS Global Securities Portfolio	Common Collective Trust 1,146 units	**		12,961
*UBS Small Company Value Portfolio	Common Collective Trust 238 units	**		8,161
*UBS Mid-Cap Growth Portfolio	Common Collective Trust 759 units	**		7,968
* Participants loans	53 loans with interest rates ranging from 5 to 10.5%	_		357,207
			\$	19,815,795

^{*} Denotes a party in interest.

See accompanying independent registered public accounting firm's report.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

IMPAC COMPANIES 401(k) SAVINGS PLAN

By: /s/ SHERALEE URBANO
Its: Vice President, Human Resources

Date: October 15, 2007

Exhibit Index

Exhibit Number Description

23.1 Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm

^{**} Cost information is not presented, as investment is participant-directed.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement Form S-8 (No.333-117070) pertaining to the Impac Companies 401(k) Savings Plan of Impac Mortgage Holdings, Inc. of our report dated October 9, 2007 with respect to the financial statements and schedule of the Impac Companies 401(k) Savings Plan included in this Annual Report (Form 11-K) for the year ended December 31, 2006.

/s/ Ernst & Young LLP

Irvine, California October 9, 2007