

101 Barclay Street, 4W
New York, NY 10286

Officer: Kelly Crosson
212-815-3235
Associate: William J. Herrmann
212-815-7080

First Horizon Asset Securities Inc.
First Horizon Alternative Mortgage Securities Trust 2006-AA3
Mortgage Pass-Through Certificates, Series 2006-AA3

Certificateholder Monthly Distribution Summary

Class	Cusip	Class Description	Certificate Rate Type	Beginning Balance	Pass Through Rate (%)	Principal Distribution	Interest Distribution	Total Distribution	Current Realized Losses	Ending Balance	Cumulative Realized Losses
A-1	320516AA5	Senior	Var-30/360	299,289,001.54	6.376923	6,670,307.93	1,590,452.47	8,260,760.40	0.00	292,618,693.61	0.00
A-2	320516AB3	Senior	Var-30/360	17,754,724.00	6.376923	395,702.73	94,350.43	490,053.16	0.00	17,359,021.27	0.00
A-R	320516AC1	Senior	Var-30/360	0.00	6.376923	0.00	0.00	0.00	0.00	0.00	0.00
B-1	320516AD9	Junior	Var-30/360	10,992,301.35	6.376923	1,233.65	58,414.22	59,647.87	0.00	10,991,067.70	0.00
B-2	320516AE7	Junior	Var-30/360	3,797,994.49	6.376923	426.24	20,182.93	20,609.18	0.00	3,797,568.25	0.00
B-3	320516AF4	Junior	Var-30/360	2,797,786.00	6.376923	313.99	14,867.72	15,181.71	0.00	2,797,472.01	0.00
B-4	320516AG2	Junior	Var-30/360	1,998,418.57	6.376923	224.28	10,619.80	10,844.08	0.00	1,998,194.29	0.00
B-5	320516AH0	Junior	Var-30/360	1,598,734.86	6.376923	179.42	8,495.84	8,675.27	0.00	1,598,555.43	0.00
B-6	320516AJ6	Junior	Var-30/360	1,199,913.53	6.376923	134.66	6,376.46	6,511.13	0.00	1,199,778.87	0.00
Totals				339,428,874.34		7,068,522.90	1,803,759.87	8,872,282.80	0.00	332,360,351.43	0.00

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Principal Distribution Detail

Class	Cusip	Original Certificate Balance	Beginning Certificate Balance	Scheduled Principal Distribution	Unscheduled Principal Adjustments	Net Principal Distribution	Current Realized Losses	Ending Certificate Balance	Ending Certificate Factor
A-1	320516AA5	356,489,000.00	299,289,001.54	6,670,307.93	0.00	6,670,307.93	0.00	292,618,693.61	0.82083512706
A-2	320516AB3	21,148,000.00	17,754,724.00	395,702.73	0.00	395,702.73	0.00	17,359,021.27	0.82083512706
A-R	320516AC1	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00000000000
B-1	320516AD9	11,001,000.00	10,992,301.35	1,233.65	0.00	1,233.65	0.00	10,991,067.70	0.99909714539
B-2	320516AE7	3,801,000.00	3,797,994.49	426.24	0.00	426.24	0.00	3,797,568.25	0.99909714539
B-3	320516AF4	2,800,000.00	2,797,786.00	313.99	0.00	313.99	0.00	2,797,472.01	0.99909714539
B-4	320516AG2	2,000,000.00	1,998,418.57	224.28	0.00	224.28	0.00	1,998,194.29	0.99909714539
B-5	320516AH0	1,600,000.00	1,598,734.86	179.42	0.00	179.42	0.00	1,598,555.43	0.99909714539
B-6	320516AJ6	1,200,863.07	1,199,913.53	134.66	0.00	134.66	0.00	1,199,778.87	0.99909714539
Totals		400,039,963.07	339,428,874.34	7,068,522.90	0.00	7,068,522.90	0.00	332,360,351.43	

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Interest Distribution Detail

Class	Beginning Certificate Balance	Pass Through Rate (%)	Effective Coupon (%)	Current Interest	Deferred Interest	Total Interest Due	Net Interest Shortfall	Interest Paid
A-1	299,289,001.54	6.376923	6.376923	1,590,452.47	0.00	1,590,452.47	0.00	1,590,452.47
A-2	17,754,724.00	6.376923	6.376923	94,350.43	0.00	94,350.43	0.00	94,350.43
A-R	0.00	6.376923	0.000000	0.00	0.00	0.00	0.00	0.00
B-1	10,992,301.35	6.376923	6.376923	58,414.22	0.00	58,414.22	0.00	58,414.22
B-2	3,797,994.49	6.376923	6.376923	20,182.93	0.00	20,182.93	0.00	20,182.93
B-3	2,797,786.00	6.376923	6.376923	14,867.72	0.00	14,867.72	0.00	14,867.72
B-4	1,998,418.57	6.376923	6.376923	10,619.80	0.00	10,619.80	0.00	10,619.80
B-5	1,598,734.86	6.376923	6.376923	8,495.84	0.00	8,495.84	0.00	8,495.84
B-6	1,199,913.53	6.376923	6.376923	6,376.46	0.00	6,376.46	0.00	6,376.46
Totals	339,428,874.34			1,803,759.87	0.00	1,803,759.87	0.00	1,803,759.87

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Current Payment Information
Factors per \$1,000

Class	Cusip	Original Certificate Balance	Beginning Certificate Balance	Principal Distribution	Interest Distribution	Ending Certificate Balance	Pass Through Rate (%)
A-1	320516AA5	356,489,000.00	839.546245578	18.711118517	4.461434902	820.835127061	6.376923
A-2	320516AB3	21,148,000.00	839.546245578	18.711118517	4.461434902	820.835127061	6.376923
A-R	320516AC1	100.00	0.000000000	0.000000000	0.000000000	0.000000000	6.376923
B-1	320516AD9	11,001,000.00	999.209285378	0.112139985	5.309900680	999.097145394	6.376923
B-2	320516AE7	3,801,000.00	999.209285378	0.112139985	5.309900680	999.097145394	6.376923
B-3	320516AF4	2,800,000.00	999.209285378	0.112139985	5.309900680	999.097145394	6.376923
B-4	320516AG2	2,000,000.00	999.209285378	0.112139985	5.309900680	999.097145394	6.376923
B-5	320516AH0	1,600,000.00	999.209285378	0.112139985	5.309900680	999.097145394	6.376923
B-6	320516AJ6	1,200,863.07	999.209285378	0.112139985	5.309900680	999.097145394	6.376923
Totals		400,039,963.07	848.487415445	17.669541927	4.508949196	830.817873493	

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Pool Level Data

Distribution Date		01/25/07
Cut-off Date		05/01/06
Record Date		12/29/06
Determination Date		01/20/07
Accrual Period 30/360	Begin	12/01/06
	End	01/01/07
Number of Days in 30/360 Accrual Period		30

Collateral Detail

Original Mortgage Loan Details

Original Aggregate Loan Count	1,538
Original Stated Principal Balance	400,039,963.07
Original Weighted Average Mortgage Rate	6.81279%
Original Weighted Average Net Mortgage Rate	6.43779%
Original Weighted Average Remaining Term	360

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Current Mortgage Loan Details

Beginning Aggregate Loan Count	1,343
Loans Paid Off or otherwise removed pursuant to the PSA	<u>20</u>
Ending Aggregate Loan Count	1,323
Beginning Pool Stated Principal Balance	339,428,874.34
Scheduled Principal	38,093.67
Unscheduled Principal	7,030,429.25
Realized Principal Losses	<u>0.00</u>
Ending Pool Stated Principal Balance	332,360,351.42
Beginning Weighted Average Mortgage Rate	6.75192%
Beginning Weighted Average Net Mortgage Rate	6.37692%
Ending Weighted Average Mortgage Rate	6.74122%
Ending Weighted Average Net Mortgage Rate	6.36622%
Beginning Weighted Average Remaining Term to Maturity	352
Ending Weighted Average Remaining Term to Maturity	351

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Delinquency Information

Delinquency Information

	30-59 Days				60-89 Days				90+ Days			
	Loan Count	Loan Count %	Balance	Balance %	Loan Count	Loan Count %	Balance	Balance %	Loan Count	Loan Count %	Balance	Balance %
Group 1	33	2.49433%	9,650,859.83	2.90373%	5	0.37793%	1,374,829.76	0.41366%	4	0.30234%	1,423,993.49	0.42845%

	Foreclosure				Bankruptcy				REO			
	Loan Count	Loan Count %	Balance	Balance %	Loan Count	Loan Count %	Balance	Balance %	Loan Count	Loan Count %	Balance	Balance %
Group 1	9	0.68027%	2,688,096.65	0.80879%	1	0.07559%	95,995.28	0.02888%	1	0.07559%	139,684.06	0.04203%

60+ Delinquency, Foreclosure, REO and Bankruptcy

5,722,599.24

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Available Funds

Interest

Scheduled Interest	1,904,649.66
Plus: Compensating Interest	5,182.29
Less: Master Servicer Fee	104,374.38
Less: Trustee Fee	<u>1,697.14</u>
Total Interest Available	1,803,760.42

Principal

Scheduled Principal	38,093.67
Paid in Full Principal	6,799,484.20
Curtailment Principal	230,945.05
Liquidation Principal	0.00
Repurchased Principal	0.00
Substitution Adjustment Principal	0.00
Unanticipated Principal Recoveries	0.00
Remaining Amounts in Supplemental Account	<u>0.00</u>
Total Principal Available	<u>7,068,522.92</u>

Total Available Funds

8,872,283.34

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Principal Distribution Amounts

Senior and Subordinate Percentages

Senior Percentage Original	94.39984%
Senior Prepayment Percentage Original	100.00000%
Senior Percentage	93.40505%
Senior Prepayment Percentage	100.00000%
Subordinate Percentages	6.59495%
Subordinate Prepayment Percentage	0.00000%

Principal Distribution Amounts

Senior Principal Distribution Amount	7,066,010.66
Subordinate Principal Distribution Amount	<u>2,512.26</u>
Total Principal Distribution Amount	7,068,522.92

Conditions for Senior Prepayment Interest Shifting

Delinquency Test Pass	YES
Loss Test Pass	YES

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Distribution Account		
	Beginning Balance	0.00
Deposits	Available Funds	8,872,283.34
	Other Deposits Required by the PSA	<u>0.00</u>
	Total Deposits	8,872,283.34
Withdrawals	To the Senior Classes	8,750,813.56
	To the Subordinate Classes	<u>121,469.78</u>
	Total Withdrawals	<u>8,872,283.34</u>
	Ending Balance	0.00

Fees of the Trust		
	Gross Master Servicing Fee	104,374.38
	Net Master Servicing Fee	99,192.09
	Trustee Fee	1,697.14
	Bond Insurance Premium	<u>0.00</u>
	Total Net Loan Fees	100,889.24

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Mortgage Prepayment Details

Principal Balance of Loans Paid in Full	6,799,484.20
Prepayment Interest Excess (to Master Servicer)	0.00
Prepayment Interest Shortfall	5,182.29
Compensating Interest	5,182.29
Non-Supported Prepayment Interest Shortfall	0.00
CPR %	22.21246%
SMM %	2.07149%

Loan Substitution

Aggregate Stated of Principal Balances Removed	0.00
Aggregate Stated of Principal Balance Added	<u>0.00</u>
Aggregate Principal Substitution Shortfall Amount	0.00

Net Interest Shortfalls

Net Prepayment Interest Shortfalls	0.00
Relief Act Reduction Shortfalls	<u>0.00</u>
Total Net Interest Shortfalls	0.00

Servicer Advances

Principal Advances	970.16
Interest Advances	<u>58,913.98</u>
Total Advances	59,884.14

Advances made regarding the Mortgage Loans other than for Delinquent Principal and Interest

NONE

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Realized Loss Detail

Current Period Realized Losses	0.00
Cumulative Realized Losses	0.00
Total Liquidated Loan Balance	0.00
Total Liquidated Proceeds	0.00
Subsequent Recoveries	0.00

<u>Loan ID</u>	<u>Liquidation Balance</u>	<u>Liquidation Proceeds</u>	<u>Realized Loss</u>	<u>Date</u>
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Group I

N/A

Bankruptcy, Fraud and Special Hazard Coverage Amounts

Original Bankruptcy Loss Limit	150,000.00
Original Bankruptcy Loss Limit %	0.037%
Current Bankruptcy Loss Limit	150,000.00
Current Bankruptcy Loss Limit %	0.045%
Original Special Hazard Loss Limit	4,000,400.00
Original Special Hazard Loss Limit %	1.000%
Current Special Hazard Loss Limit	3,323,603.51
Current Special Hazard Loss Limit %	1.000%
Original Fraud Loss Limit	8,000,799.00
Original Fraud Loss Limit %	2.000%
Current Fraud Loss Limit	8,000,799.00
Current Fraud Loss Limit %	2.407%

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Credit Enhancements

Subordination

Credit Support

Class A
Class A Percentage

<u>Original</u>	<u>Current</u>
377,637,100.00	309,977,714.88
94.399844%	93.265552%

Class B-1
Class B-1 Percentage

11,001,000.00	10,991,067.70
2.749975%	3.306973%

Class B-2
Class B-2 Percentage

3,801,000.00	3,797,568.25
0.950155%	1.142606%

Class B-3
Class B-3 Percentage

2,800,000.00	2,797,472.01
0.699930%	0.841698%

Class B-4
Class B-4 Percentage

2,000,000.00	1,998,194.29
0.499950%	0.601213%

Class B-5
Class B-5 Percentage

1,600,000.00	1,598,555.43
0.399960%	0.480971%

Class B-6
Class B-6 Percentage

1,200,863.07	1,199,778.87
0.300186%	0.360987%

Material Changes to Pool Assets Disclosure

Material Modifications, extensions or waivers to pool asset terms, fees, penalties or payments
Material breaches of pool asset representations or warranties or transaction covenants

NONE
NONE

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