



101 Barclay Street, 8W
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	340,527,034.57	6.420264	6,645,942.57	1,821,894.52	8,467,837.09	0.00	333,881,092.00	0.00
A-2	320516AB3	Senior	Var-30/360	20,201,088.19	6.420264	394,257.31	108,080.26	502,337.57	0.00	19,806,830.88	0.00
A-R	320516AC1	Senior	Var-30/360	0.00	6.420264	0.00	0.00	0.00	0.00	0.00	0.00
B-1	320516AD9	Junior	Var-30/360	10,998,543.63	6.420264	1,254.47	58,844.63	60,099.09	0.00	10,997,289.16	0.00
B-2	320516AE7	Junior	Var-30/360	3,800,151.29	6.420264	433.44	20,331.65	20,765.08	0.00	3,799,717.85	0.00
B-3	320516AF4	Junior	Var-30/360	2,799,374.80	6.420264	319.29	14,977.27	15,296.56	0.00	2,799,055.51	0.00
B-4	320516AG2	Junior	Var-30/360	1,999,553.43	6.420264	228.06	10,698.05	10,926.11	0.00	1,999,325.36	0.00
B-5	320516AH0	Junior	Var-30/360	1,599,642.74	6.420264	182.45	8,558.44	8,740.89	0.00	1,599,460.29	0.00
B-6	320516AJ6	Junior	Var-30/360	1,200,594.93	6.420264	136.94	6,423.45	6,560.38	0.00	1,200,458.00	0.00
Totals				383,125,983.58		7,042,754.53	2,049,808.27	9,092,562.77	0.00	376,083,229.05	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	340,527,034.57	6,645,942.57	0.00	6,645,942.57	0.00	333,881,092.00	0.93658175147
A-2	320516AB3	21,148,000.00	20,201,088.19	394,257.31	0.00	394,257.31	0.00	19,806,830.88	0.93658175147
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	10,998,543.63	1,254.47	0.00	1,254.47	0.00	10,997,289.16	0.99966268159
B-2	320516AE7	3,801,000.00	3,800,151.29	433.44	0.00	433.44	0.00	3,799,717.85	0.99966268159
B-3	320516AF4	2,800,000.00	2,799,374.80	319.29	0.00	319.29	0.00	2,799,055.51	0.99966268159
B-4	320516AG2	2,000,000.00	1,999,553.43	228.06	0.00	228.06	0.00	1,999,325.36	0.99966268159
B-5	320516AH0	1,600,000.00	1,599,642.74	182.45	0.00	182.45	0.00	1,599,460.29	0.99966268159
B-6	320516AJ6	1,200,863.07	1,200,594.93	136.94	0.00	136.94	0.00	1,200,458.00	0.99966268159
Totals		400,039,963.07	383,125,983.58	7,042,754.53	0.00	7,042,754.53	0.00	376,083,229.05	



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Interest Distribution Detail

Class	Beginning Certificate Balance	Pass Through Rate (%)	Current Interest	Deferred Interest	Total Interest Due	Net Interest Shortfall	Interest Paid
A-1	340,527,034.57	6.420264	1,821,894.52	0.00	1,821,894.52	0.00	1,821,894.52
A-2	20,201,088.19	6.420264	108,080.26	0.00	108,080.26	0.00	108,080.26
A-R	0.00	6.420264	0.00	0.00	0.00	0.00	0.00
B-1	10,998,543.63	6.420264	58,844.63	0.00	58,844.63	0.00	58,844.63
B-2	3,800,151.29	6.420264	20,331.65	0.00	20,331.65	0.00	20,331.65
B-3	2,799,374.80	6.420264	14,977.27	0.00	14,977.27	0.00	14,977.27
B-4	1,999,553.43	6.420264	10,698.05	0.00	10,698.05	0.00	10,698.05
B-5	1,599,642.74	6.420264	8,558.44	0.00	8,558.44	0.00	8,558.44
B-6	1,200,594.93	6.420264	6,423.45	0.00	6,423.45	0.00	6,423.45
Totals	383,125,983.58		2,049,808.27	0.00	2,049,808.27	0.00	2,049,808.27



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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	955.224521837	18.642770372	5.110661263	936.581751465	6.420264
A-2	320516AB3	21,148,000.00	955.224521837	18.642770372	5.110661263	936.581751465	6.420264
A-R	320516AC1	100.00	0.000000000	0.000000000	0.000000000	0.000000000	6.420264
B-1	320516AD9	11,001,000.00	999.776713674	0.114032080	5.349025288	999.662681594	6.420264
B-2	320516AE7	3,801,000.00	999.776713674	0.114032080	5.349025288	999.662681594	6.420264
B-3	320516AF4	2,800,000.00	999.776713674	0.114032080	5.349025288	999.662681594	6.420264
B-4	320516AG2	2,000,000.00	999.776713674	0.114032080	5.349025288	999.662681594	6.420264
B-5	320516AH0	1,600,000.00	999.776713674	0.114032080	5.349025288	999.662681594	6.420264
B-6	320516AJ6	1,200,863.07	999.776713673	0.114032080	5.349025288	999.662681594	6.420264
Totals		400,039,963.07	957.719275444	17.605127438	5.124008747	940.114148006	



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Pool Level Data

Distribution Date		8/25/06
Cut-off Date		5/ 1/06
Record Date		7/31/06
Determination Date		8/20/06
Accrual Period 30/360	Begin	7/ 1/06
	End	8/ 1/06
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	1,484
Loans Paid Off or otherwise removed pursuant to the PSA	<u>24</u>
Ending Aggregate Loan Count	1,460
 Beginning Pool Stated Principal Balance	 383,125,983.57
Scheduled Principal	43,698.41
Unscheduled Principal	6,999,056.11
Realized Principal Losses	<u>0.00</u>
Ending Pool Stated Principal Balance	376,083,229.05
 Beginning Weighted Average Mortgage Rate	 6.79526%
Beginning Weighted Average Net Mortgage Rate	6.42026%
Ending Weighted Average Mortgage Rate	6.78504%
Ending Weighted Average Net Mortgage Rate	6.41004%
 Beginning Weighted Average Remaining Term to Maturity	 357
Ending Weighted Average Remaining Term to Maturity	356



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Delinquency Information

Delinquency Information

	30-59 Days				60-89 Days				90+ Days			
	Count	Count %	Balance	Balance %	Count	Count %	Balance	Balance %	Count	Count %	Balance	Balance %
Group 1	14	0.95890%	4,874,018.16	1.29599%	7	0.47945%	2,226,310.97	0.59197%	0	0.00000%	0.00	0.00000%

	Foreclosure				Bankruptcy				REO			
	Count	Count %	Balance	Balance %	Count	Count %	Balance	Balance %	Count	Count %	Balance	Balance %
Group 1	0	0.00000%	0.00	0.00000%	0	0.00000%	0.00	0.00000%	0	0.00000%	0.00	0.00000%

60+ Delinquency, Foreclosure, REO and Bankruptcy

0.00



The BANK
of NEW YORK

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Available Funds

Interest

Scheduled Interest	2,164,790.93
Plus: Compensating Interest	4,744.80
Less: Master Servicer Fee	117,811.24
Less: Trustee Fee	<u>1,915.63</u>
Total Interest Available	2,049,808.86

Principal

Scheduled Principal	43,698.41
Paid in Full Principal	7,039,879.19
Curtailment Principal	-40,823.08
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>7,042,754.52</u>

Total Available Funds

9,092,563.38



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Principal Distribution Amounts	
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Senior and Subordinate Percentages

Senior Percentage Original	94.39984%
Senior Prepayment Percentage Original	100.00000%
Senior Percentage	94.15392%
Senior Prepayment Percentage	100.00000%
Subordinate Percentages	5.84608%
Subordinate Prepayment Percentage	0.00000%

Principal Distribution Amounts

Senior Principal Distribution Amount	7,040,199.87
Subordinate Principal Distribution Amount	<u>2,554.65</u>
Total Principal Distribution Amount	7,042,754.52

Conditions for Senior Prepayment Interest Shifting

Delinquency Test Pass	YES
Loss Test Pass	YES



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Distribution Account		
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	Beginning Balance	0.00
Deposits	Available Funds	9,092,563.38
	Other Deposits Required by the PSA	<u>0.00</u>
	Total Deposits	9,092,563.38
Withdrawals	To the Senior Classes	8,970,174.66
	To the Subordinate Classes	<u>122,388.72</u>
	Total Withdrawals	<u>9,092,563.38</u>
	Ending Balance	0.00

Fees of the Trust	
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Gross Master Servicing Fee	117,811.24
Net Master Servicing Fee	113,066.44
Trustee Fee	1,915.63
Bond Insurance Premium	<u>0.00</u>
Total Net Loan Fees	114,982.07



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Mortgage Prepayment Details

Principal Balance of Loans Paid in Full	7,039,879.19
Prepayment Interest Excess (to Master Servicer)	0.00
Prepayment Interest Shortfall	4,744.80
Compensating Interest	4,744.80
Non-Supported Prepayment Interest Shortfall	0.00
CPR %	19.85014%
SMM %	1.82704%

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	123.29
Interest Advances	<u>16,665.86</u>
Total Advances	16,789.15

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>Group</u>	<u>Loan ID</u>	<u>Liquidation Balance</u>	<u>Liquidation Proceeds</u>	<u>Realized Loss</u>
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 %	0.040%
Original Special Hazard Loss Limit	4,000,400.00
Original Special Hazard Loss Limit %	1.000%
Current Special Hazard Loss Limit	3,760,832.29
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 %	2.127%



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Credit Enhancements

Subordination

Credit Support

	Original	Current
Class A	377,637,100.00	353,687,922.88
Class A Percentage	94.399844%	94.045120%
Class B-1	11,001,000.00	10,997,289.16
Class B-1 Percentage	2.749975%	2.924164%
Class B-2	3,801,000.00	3,799,717.85
Class B-2 Percentage	0.950155%	1.010340%
Class B-3	2,800,000.00	2,799,055.51
Class B-3 Percentage	0.699930%	0.744265%
Class B-4	2,000,000.00	1,999,325.36
Class B-4 Percentage	0.499950%	0.531618%
Class B-5	1,600,000.00	1,599,460.29
Class B-5 Percentage	0.399960%	0.425294%
Class B-6	1,200,863.07	1,200,458.00
Class B-6 Percentage	0.300186%	0.319200%

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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<u>Issuance Coupon</u>		Number of Items	Percent of Items	Principal Balance	Percent of Balance
< =	5.000000000000	0	0.000	0.00	0.000
5.000000000000	- 5.501000000000	3	0.205	834,853.78	0.222
5.501000000000	- 6.001000000000	98	6.712	24,455,287.01	6.503
6.001000000000	- 6.501000000000	480	32.877	118,869,693.59	31.607
6.501000000000	- 7.001000000000	554	37.945	138,186,954.09	36.744
7.001000000000	- 7.501000000000	187	12.808	55,626,674.70	14.791
7.501000000000	- 8.001000000000	108	7.397	27,635,403.41	7.348
8.001000000000	- 8.501000000000	30	2.055	10,474,362.47	2.785
8.501000000000	- 9.001000000000	0	0.000	0.00	0.000
9.001000000000	- 9.501000000000	0	0.000	0.00	0.000
9.501000000000	- 10.001000000000	0	0.000	0.00	0.000
10.001000000000	- 10.501000000000	0	0.000	0.00	0.000
10.501000000000	- 11.001000000000	0	0.000	0.00	0.000
11.001000000000	- 11.501000000000	0	0.000	0.00	0.000
11.501000000000	- 12.001000000000	0	0.000	0.00	0.000
12.001000000000	- 12.501000000000	0	0.000	0.00	0.000
>	12.501000000000	0	0.000	0.00	0.000
Wgt Ave / Total:		1460	100.000	376,083,229.05	100.000

<u>Update Face</u>		Number of Items	Percent of Items	Principal Balance	Percent of Balance
< =	0.00	0	0.000	0.00	0.000
0.00	- 25,000.00	0	0.000	0.00	0.000
25,000.00	- 50,000.00	6	0.411	262,597.44	0.070
50,000.00	- 75,000.00	27	1.849	1,723,395.63	0.458
75,000.00	- 100,000.00	79	5.411	7,149,667.94	1.901
100,000.00	- 125,000.00	105	7.192	11,894,300.59	3.163
125,000.00	- 150,000.00	133	9.110	18,283,455.06	4.862
150,000.00	- 175,000.00	113	7.740	18,338,522.97	4.876
175,000.00	- 200,000.00	142	9.726	26,810,552.52	7.129
200,000.00	- 225,000.00	127	8.699	27,051,380.15	7.193
225,000.00	- 250,000.00	128	8.767	30,462,588.50	8.100



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Update Face			Number of Items	Percent of Items	Principal Balance	Percent of Balance
250,000.00	-	275,000.00	90	6.164	23,599,189.16	6.275
275,000.00	-	300,000.00	87	5.959	25,019,537.68	6.653
300,000.00	-	325,000.00	71	4.863	22,295,472.39	5.928
325,000.00	-	350,000.00	71	4.863	23,981,028.26	6.377
350,000.00	-	375,000.00	57	3.904	20,634,498.24	5.487
375,000.00	-	400,000.00	49	3.356	19,030,982.85	5.060
400,000.00	-	425,000.00	68	4.658	28,129,156.77	7.480
425,000.00	-	450,000.00	7	0.479	3,066,824.97	0.815
450,000.00	-	475,000.00	7	0.479	3,230,301.41	0.859
475,000.00	-	500,000.00	9	0.616	4,422,012.09	1.176
500,000.00	-	525,000.00	7	0.479	3,589,439.12	0.954
525,000.00	-	550,000.00	9	0.616	4,846,217.94	1.289
550,000.00	-	575,000.00	6	0.411	3,375,954.10	0.898
575,000.00	-	600,000.00	9	0.616	5,313,185.92	1.413
600,000.00	-	625,000.00	4	0.274	2,461,750.00	0.655
625,000.00	-	650,000.00	12	0.822	7,731,297.41	2.056
650,000.00	-	675,000.00	2	0.137	1,329,000.00	0.353
675,000.00	-	700,000.00	1	0.068	693,600.00	0.184
700,000.00	-	725,000.00	1	0.068	720,000.00	0.191
725,000.00	-	750,000.00	2	0.137	1,476,468.60	0.393
750,000.00	-	775,000.00	3	0.205	2,292,136.09	0.609
775,000.00	-	800,000.00	3	0.205	2,360,500.00	0.628
>		800,000.00	25	1.712	24,508,215.25	6.517
Wgt Ave / Total:			1460	100.000	376,083,229.05	100.000

Update Term		Number of Items	Percent of Items	Principal Balance	Percent of Balance
< =	120	0	0.000	0.00	0.000
120	-	180	0	0.00	0.000
180	-	300	0	0.00	0.000
300	-	360	1460	376,083,229.05	100.000
>	360	0	0.000	0.00	0.000
Wgt Ave / Total:		1460	100.000	376,083,229.05	100.000