

Assumptions	
Real Estate Commissions	6%
Purchase Closing Costs U.S. (FRB)	5.0%
Discount for 1% Encumbrance	5%
Mortgage Rate	5.00%
Mortgage Length (yrs)	30
Mortgage LTV	85.00%
Appreciation Rate	2%
Opportunity Cost Rate	4.00%
Initial Property Value without PTF	\$300,000

**EXHIBIT A**

This spreadsheet uses the same 5-year turnover assumptions as the CRE Spreadsheet. However, 5 years is not supported by any turnover data. This spreadsheet also uses a significantly lower opportunity cost rate than the data suggests.

	Transaction 1; 5 Year Hold		Transaction 2; 5 Year Hold		Transaction 3; 5 year Hold	
	Without a PTF	With a PTF	Without a PTF	With a PTF	Without a PTF	With a PTF
<b>PURCHASE</b>	<b>Year 1</b>	<b>Year 1</b>	<b>Year 6</b>	<b>Year 6</b>	<b>Year 11</b>	<b>Year 11</b>
Purchase Price	\$300,000.00	\$285,000.00	\$331,224.24	\$314,663.03	\$365,698.33	\$347,413.41
Mortgage Amount	\$255,000.00	\$242,250.00	\$281,540.60	\$267,463.57	\$310,843.58	\$295,301.40
Equity day of purchase	\$45,000.00	\$42,750.00	\$49,683.64	\$47,199.45	\$54,854.75	\$52,112.01
Closing Costs at Initial Purchase	(\$15,000.00)	(\$14,250.00)	(\$16,561.21)	(\$15,733.15)	(\$18,284.92)	(\$17,370.67)
<b>CARRYING COSTS</b>						
Principal Payments	\$20,836.73	\$19,794.90	\$23,005.44	\$21,855.17	\$25,399.86	\$24,129.87
Less Carrying Costs:						
Interest payments	\$61,296.98	\$58,232.13	\$67,676.81	\$64,292.97	\$74,720.67	\$70,984.64
Taxes (U.S. property) 1.04% of value	\$16,236.61	\$15,424.78	\$17,926.52	\$17,030.20	\$19,792.33	\$18,802.71
Insurance (Hazard) \$3.50/\$1,000 value	\$5,464.24	\$5,191.03	\$6,032.96	\$5,731.32	\$6,660.88	\$6,327.84
Total Carrying Costs:	(\$82,997.82)	(\$78,847.93)	(\$91,636.30)	(\$87,054.49)	(\$101,173.88)	(\$96,115.19)
<b>OPPORTUNITY COSTS</b>						
Less Opportunity Costs Associated with Added Costs:						
Opportunity costs on added principal payments	\$230.24	\$0.00	\$254.21	\$0.00	\$280.66	\$0.00
Opportunity costs on added closing costs	\$165.75	\$0.00	\$183.00	\$0.00	\$202.05	\$0.00
Opportunity costs on added carrying costs	\$917.11	\$0.00	\$1,012.57	\$0.00	\$1,117.95	\$0.00
Opportunity costs on added equity	\$497.24	\$0.00	\$549.00	\$0.00	\$606.14	\$0.00
Total Opportunity Costs:	(\$1,810.34)	\$0.00	(\$1,998.77)	\$0.00	(\$2,206.80)	\$0.00
<b>SALE</b>	<b>Year 5</b>	<b>Year 5</b>	<b>Year 10</b>	<b>Year 10</b>	<b>Year 15</b>	<b>Year 15</b>
Sales Price	\$331,224.24	\$314,663.03	\$365,698.33	\$347,413.41	\$403,760.50	\$383,572.48
Real Estate Commissions	(\$19,873.45)	(\$18,879.78)	(\$21,941.90)	(\$20,844.80)	(\$24,225.63)	(\$23,014.35)
1% Private Transfer Fee Paid When Sold	\$0.00	(\$3,146.63)	\$0.00	(\$3,474.13)	\$0.00	(\$3,835.72)
<b>SUMMARY</b>						
Appreciation from Purchase to Sale	10.41%	10.41%	10.41%	10.41%	10.41%	10.41%
<b>Net Financial Position</b>	<b>(\$88,457.38)</b>	<b>(\$85,461.31)</b>	<b>(\$97,664.10)</b>	<b>(\$94,356.20)</b>	<b>(\$107,829.05)</b>	<b>(\$104,176.87)</b>
<b>Financial Benefit to the Buyer with Transfer Fee</b>	<b>\$2,996.07</b>		<b>\$3,307.90</b>		<b>\$3,652.19</b>	

PTF = Private Transfer Fee.

The longer the holding period, the more beneficial the PTF is to the consumer. The current average holding period in the U.S. is 12 years. This table shows a holding period of 5 years.

Added cost is the difference between the respective line item without a PTF & with a PTF.

Higher return on alternate investments increases opportunity costs of unencumbered property.

There is no seller "lost appreciation". The lost appreciation shown in Figure 1, Page 6 of the CRE paper are differences in values of two homes which appreciated at the same rate (2%/yr) for the same duration (5 yrs, 10 yrs, or 15 yrs), each with a different basis (\$300,000 and \$285,000). This line shows the total appreciation of the respective homes over the holding period.

Net Financial Position = Sales Price - Real Estate Commissions - Transfer Fee - Purchase Price - Carrying Costs - Opportunity Costs