

# Memorandum

To: Dr. Ashok K. Roy, VP for Finance & Administration/Chief Financial Officer

From: Kit Duke, Associate Vice President

Robert McMaster, Senior Property Manager

Date: May 9, 2013

Re: Washington DC - Condo Unit at Waterford House – Unit 711

In response to your memorandum dated May 7, 2013, we have answered your questions below in the order posed.

1. Who owns the property? It is my understanding that it was purchased with proceeds from our Inflation-Proofing fund of the Land Grant Endowment. As such, any proceeds from the sale of the property should go back to the said Endowment.

# Facilities & Land Management Response:

The Board of Regents has the right and authority to direct any proceeds (Cash Flow / Sales Proceeds) per University policy and regulations.

2. The Condo has been vacant for 15 months. Why did we not start the conversation earlier?

# Facilities & Land Management Response:

At the time the Waterford House Condominium ("Condo") was vacated in February 2012, Land Management ("LM") had only one Senior Property Manager ("SPM") on staff and two open SPM positions to be filled. Other LM business that had priority or a higher potential to generate University revenue was attended to before all the necessary steps to rent the condo could be concluded. Additionally, the changes necessitated by University policy to the management company's ("WMS") standard property management agreement could only be addressed by the company's owner and senior officers, as the potential management fee of \$176 per month did not justify having the company's legal counsel work on the agreement. Needless to say, this particular piece of new business was not a high priority to WMS. Thus, the management agreement went



through several rounds of "redline" exchanges and negations that were begun and stopped by either pressing University or WMS business.

3. Your Analysis depicts an Internal Rate of Return (IRR) of 7.5%. This is considered marginal for real estate investment particularly one which is isolated.

# Facilities & Land Management Response:

We believe the initial decision to purchase the Condo was driven more as an operating cost measure and not necessarily as a pure real estate investment on behalf of the LGTF. The limited market and financial analysis completed by former SW Land Management staff indicates that the escalating 2000 to 2006 Washington DC real estate market influenced their confidence that purchasing the Condo would not result in a poor investment for the University.

The Washington DC real estate market is one of only a dozen or so markets that have a relatively stable and ingrained economic driver (US Federal Government) that makes it one of the most coveted and safest real estate markets in the world, similar to New York or London or even Houston. This is not to imply that the DC market isn't subject to bubbles or downturns, but simply that all things being equal, investors are normally willing to accept lower yields in these world-class markets as the perceived long term market risk is fairly low.

Additionally, the Real Estate Research Corporation ("RERC"), one of the most recognized real estate research, valuation and consulting firms in the nation, produces the RERC Investment Survey every quarter that details actual Pre-tax Yields ("IRR%") earned on all Property types, as reported by Investors, REITs, Hedge Funds, Life Insurance Co., etc. The 4Q 2012 national report indicates that the current IRR% being sought for residential rentals ranges between 5% and 10% with the national average being 7.4%. By this measure, the projected 7.4% IRR for the Condo would be considered a very good return for the DC market.

4. Our Land Grant Endowment return for the last 9 months has been 10%. So, if we sell the property and invest it in our Land Grant Endowment, one could argue that over the long term, the Land Grand Endowment fund should outperform the IRR of 7.5% calculated for a sale in 2021.

## Facilities & Land Management Response:

As part of LM's analysis, it considered the opportunity cost of not returning the Condo's capital to the LGTF for several more years. While the last 9 months may have produced



a 10% return (is the 10% return a "cash on cash" return or a true IRR yield?) it would not be prudent to project the LGTF's yield over the next several years based upon such a short term (9 mo.) result. A more accepted methodology to forecasting yields is to apply historical averages or historical trends that match the future yield periods and anticipated economic conditions in the analysis.

The LGTF's 10 year yield ending in 2012 returned an average 5.86%. The fund's 20 year average is 7.77%. The most recent 4 year average equates to 4.48%.

LM stands by its recommendation to hold the Condo for 2 to 4 years in order to achieve the projected 7.4% IRR yield. The answer to question 7 below further demonstrates that holding the Condo for a 7.4% return results in a better financial position than selling the Condo today and investing the proceeds in the LGTF.

5. Crystal City is a high end area. However, if we hold it for 15 years the Condo will become very old resulting in significant re-modeling costs.

#### Facilities & Land Management Response:

LM does not agree with the statement above. Professional management companies, like WMS, normally craft a capital improvement program for units under their control that anticipates system failures, appliance life cycles, etc. If the Board decides to hold the Condo for an additional 7-10 years, LM would create a Replacement Reserve program with WMS that escrowed funds from annual operational income, so that as capital improvements were incurred in the future, the Replacement Reserve escrow would have the funds to keep the Condo preforming in order to maximize the market's rental rate.

LM believes that the Condo's location in Crystal City and close proximity to the DC mall area and transit facilities is a far more important factor to the property's future price appreciation then whether the Condo has updated cabinetry, fixtures or appliances.

LM <u>recommends</u> holding the Condo for <u>another two to four years</u> to ride the gathering price appreciation upsurge and not to hold the Condo for the 15 year holding period. LM completed the 15 year IRR table as part of its sensitivity analysis to reach an optimum hold period. LM included that analysis to demonstrate that holding the Condo for only a few more years essentially equals the yield that a longer term strategy would produce.



6. While your analysis is rigorous, we are skeptical of basing a decision on housing prices escalating over the next couple of years. Moreover, renting the condo will require management oversight and expenses. Does the university want to be in the rental business?

# Facilities & Land Management Response:

LM is not sure what your skepticism is based upon. Do you have other data sources that counter the prevailing wisdom of the DC real estate industry? LM has numerous other sources that indicate the DC housing market is entering one of its proven historical upswings. It did not provide these additional data sources, as we did not anticipate doubt in the face of the historical trending data provided with our initial memo.

For instance, a Kiplinger report from January 2013 indicates that the "One-year change in home prices" was a positive 13.3%. It further states that the DC "... economy and housing recovery are undergirded by population growth and employment in government, defense and tech." RealtyTrac reported on February 18, 2013 that the 36% drop in available homes from January 2012 to January 2013 "... is fueling double-digit rises in home prices." We would be happy to send you some of these other data sources for your review.

LM does not want to be in the rental business, hence the hiring of WMS to handle the actual property management of the unit, which for a fee of \$176 per month is a bargain.

7. Under Option #1 and Option #2 you depict Net Sales Proceeds as \$410,840 and \$602,000. Then in the last paragraph you recommend "selling the Condo in an appreciating market in 2015/16". We have to believe it will appreciate. Also, what are the opportunity costs for proceeds when we sell?

#### Facilities & Land Management Response:

Please see the answer to the question above concerning doubt about value appreciation.

We have attached a simple analysis that demonstrates that the opportunity cost is higher if we sell the Condo in today's market and reallocate the proceeds to earn the LGTF's average return even if the LGTF's short term rate of return of 10% is used for comparison purposes. Question 4 above assumes that the projected 7.4% IRR for the recommended 10 year hold period is linear (the same for each year), when in fact the annual Return on Investment (a one year snapshot) accelerates substantially from 2012 to 2015. This is



why the IRR for the 7 year hold period is 4.65%, but holding the investment for just an additional 3 years during an appreciation upswing changes the IRR from 4.65% to 7.4% over the entire life of the investment. The attached "IRR Comparison" analysis comparing the projected IRR's for the LGTF and Condo investments starting with the same beginning and end dates results in a higher IRR for the recommended Rent & Hold strategy than by moving the Condo investment to the LGTF in 2013.

8. Under Option #2, the Potential Rental Rate (\$2,200 per month) does not change. Why is there no escalation?

# Facilities & Land Management Response:

Unlike commercial leases that will often have annual escalation clauses, residential lease agreements are typically limited to one year. If the tenant elects to remain in the unit for another year a new lease is executed and if the management company believes it can increase the rent it will do so in the new lease.

LM chose to hold the rent constant over several years in order to be somewhat conservative in its future projections. It should be noted that the standard rental income escalation rate used by the residential rental industry in multi-year pro-formas is 1%.

9. The Washing DC Real Estate Forecast (which you have included) shows a forecast of "3%". This appears to contradict the argument to "hold" the property where you say the forecast indicates an annual price appreciation of "8% to 11%". Also, if "3%" is accurate, then why should we not sell the property and invest in the Land Grant Trust Fund?

# Facilities & Land Management Response:

The 3.04% rate that you note above is based upon the 2008 – 2011 trailing average. The date of this report is December 18, 2012 and the 3% forecast was for September 2013. Other data sources, see answer #6 above, demonstrates that this forecast was not reliable as appreciation in 2012 exceeded 13%. LM include this report for the 30 year historical trending patterns and not for the flawed forecast based upon 4 of the worst years in DC real estate history.

#### IRR Comparison - Holding DC Condo vs. Selling and Investing in LGTF

# Condo Sales Scenarios

Projected Sales Price of Condo less Make-Ready Costs less RE Sales Commission (7%) less other Closing Costs Net Sales Proceeds - Amount Invested in LGTF Sell Condo in

July-13

\$452,596
(\$5,000)
(\$31,682)
(\$4,526)
\$411,389

Sell Condo in

December-15

\$602,406
(\$5,000)
(\$42,168)
(\$6,024)
\$549,213

1 of 1

Sell Condo in

June-21

\$796,501

(\$5,000)

(\$55,755)

(\$7,965)

\$727,781

#### **Investment Scenarios**

		on Inves	tment	
	LGTF Investment	LGTF		LGTF
	Basis as of 2013 2.5 yr IRR	Cash flow for Reinvestment	IRR Stack	Annual Appreciation 10.0%
oceeds or Current Value	(\$411,389)	\$0	(\$411,389)	\$41,139
w from Investment		\$0	\$0	\$41,139
oceeds & Annual Cash Flow	514,236	\$0	\$514,236	\$20,569
Flow from Investment		IRR	11.8%	

Rent DC Cond	lo until Selling	g it in Decei	mber 2015
DC Condo Investment	DC Condo Cash Flow		RE Value Avg.
Basis as of 2013 2.5 yr IRR	Available for Reinvestment	IRR Stack	Annual Appreciation 9.0%
(\$452,596)	\$15,907 \$15,907	(\$436,689) \$15,907	\$45,260 \$49,786
\$549,213	\$7,954 IRR	\$557,167 <b>14.8%</b>	\$27,382

Rent Do	C Condo until	Selling it in J	une 2021
DC Condo	DC Condo		
Investment	Cash Flow		RE Value Avg.
Basis as of 2013	Available for Reinvestment		Annual Appreciation
8 yr IRR	1101111011110111	IRR Stack	8.9%
(\$452,596)	\$15,907	(\$436,689)	\$45,260
	\$15,907	\$15,907	\$49,786
	\$15,907	\$15,907	\$54,764
	15,907	\$15,907	60,241
	15,907	\$15,907	66,265
	15,907	\$15,907	21,867
	15,907	\$15,907	23,199
\$727,781	(2,293)	\$725,488	0
	IRR	10.2%	

#### Year FY 14

- FY 14 Condo Net Sales Proceeds or Current Value
- FY 15 Investable Cash Flow from Investmen
- FY 16 Condo Net Sales Proceeds & Annual Cash Flow
- FY 17 Reinvestable Cash Flow from Investment
- FY 18 Reinvestable Cash Flow from Investment
- FY 19 Reinvestable Cash Flow from Investment
- FY 20 Reinvestable Cash Flow from Investment
- FY 21 Condo Net Sales Proceeds & Annual Cash Flow

#### Note:

1) FLM recommends renting the DC Condo until 2015/2016, then selling it. All things being equal, this scenario represents the highest potential investment return.

Sell DC Condo during Summer of 2013 and

Invest in LGTF at Projected 10% Annual Return

2) The reason the "8 yr IRR" (15 yr hold period) scenario is less then the "2.5 IRR" (7 yr hold period) scenario is due to the RE value appreciation rate during the last 3 years of the hold period is projected to decrease to 3%/yr from 10%/yr based upon DC Metro historical RE price trends.



Memorandum

To:

Ashok Roy, VPF&A

Thru:

Kit Duke, AVP FLM

From:

Robert McMaster, SPM

Date:

05-3-2013

Re:

Washington DC - Condo Unit at Waterford House - Unit 711

Per our conversation, I have outlined below the rationale for maintaining ownership of the condo for at least 2 ½ more years as opposed to placing it on the market when the condo was vacated in 2012.

## WATERFORD HOUSE CONDOMINIUM - Unit 711

#### Facts:

The Waterford House (WH) condo is a 935 sq. ft., 1 bedroom, 1 bath unit located on the "interior" (no view of river or DC) side of an 18-story building located in the highly desirable Crystal City neighborhood of Arlington, VA. The property abuts public parks, high end retail, other residential developments and office towers. It is within walking distance of a DC Metro station and has convenient access to I-395. It is less than a mile to the Capital Mall area of DC. WH provides 24-hr. concierge service, underground parking and secured access. A number of high profile and wealthy individuals have units at WH.

Condo was used for 6 years to house the University's Washington based lobbyist. This saved the University rent of approximately \$2,200/month, while costing the University \$568/mo. for the WH HOA fee and \$130/mo. for Real Estate Taxes.

Purchase Price (all settlement costs):

\$372,354

Purchase Date:

November 30, 2006

Mortgage or Loan:

None

Rent Savings per Month:

\$2,200

Ownership Expenses per Month:

\$698

Net Benefit of Ownership vs. Rent per Month:

\$1,502

# Reference 44

# Option #1 - Sell Condo during the Summer/Fall of 2013:

Projected Sales Price Range: \$400,000 - \$452,000 (per discussions with local real estate brokers)

Less

Sales Commission (7%): \$28,000 - \$31,640 Title, Closing Costs: \$4,000 - \$4,520

Make-Ready (Paint, Carpet, etc.) \$5,000

Net Sales Proceeds: \$363,000 - \$410,840

7 yr. Hold - Internal Rate of Return: 4.65% ("Best Case" - assumes sales price of \$452,000)

#### Option #2 - Rent Condo (2013 - 2015) and hold as an Appreciating Asset

Potential Rental Rate: \$2,200 per month (includes water covered by Condo Fee)

Utilities Payable by Renter: Telephone/Cable/Internet/Electric

Owner Expenses: WC HOA Fee - \$568/ mo. RE Taxes - \$130/ mo.

3-Party Management Fee for Rental of Unit: 8% of monthly rent (\$176/mo.)

Vacancy Rate for Unit over time: 67% of monthly fell (\$176

Rental of Unit Begins: May/June 2013

Rent / Expense Escalator: Held Constant through Rental Period

Capital Expenditure Reserves: \$500/year

Cost to Make-Ready for Renting: \$5,000 (Paint, Cleaning, Misc. Repairs, etc)

Estimated Positive Cash Flow by Renting: \$20,415 (2013 – 2015)

#### Sell Condo during the Summer/Fall 2015

Projected Sales Price Range: \$602,000

Less

Sales Commission (7%): \$42,140
Title, Closing Costs: \$6,020
Make-Ready (Paint, Carpet, etc.) \$5,000

Net Sales Proceeds: \$546,590

10 yr. Hold - Sale in 2015 - Internal Rate of Return: 7.38%

15 yr. Hold – Sale in 2021 - Internal Rate of Return: 7.53%

The key factor that increases the Internal Rate of Return ("IRR") for the 10 & 15 year holding periods is the projected increased rate of appreciation of the Condo's current value. A 30 year historical analysis of Washington DC residential real estate appreciation rates shows that the 6 to 9 year period following a multi-year phase of near zero or negative appreciation results in annual appreciation rates in the double-digits. Indeed, following the real estate recession of the early 1980's, the DC market saw 6 years of appreciation that averaged 10.92% per year. Likewise, following the lackluster 0.22% annual appreciation average seen from 1990 – 1997, Washington real estate experienced a 9 year cycle of annual appreciation rates that averaged 14.21% that ended in 2006.

Recent real estate reports (Greater Capital Area Association of Realtors, Forecast Charts.com) indicate that Washington real estate has once again begun an appreciation up-cycle that should last for 3 – 7 years. 2012 had a 3.5% annual price increase of Washington DC homes, after 5 years of -1.4% average annual appreciation rates. 2013 forecasts indicate an annual price appreciation of approximately 8% to 11%. Applying historical trends to this most recent upswing indicates that the next 2 to 5 years should result in average annual appreciation rates of at least 10%.

The internal rates of return calculated above assume approximately 5 years of 10% appreciation of DC metro homes. Facilities and Land Management recommends renting the condo for the next 2 to 3 years and then selling the condo in an appreciating market in 2015 / 2016. This strategy results in a 59% increase in the investments' IRR and approximately \$170,000 of increased proceeds by waiting to dispose of the condo for an additional two and half years.

## INTERNAL RATE OF RETURN ANALYSIS (7yr IRR Actual Costs)

Property Name: Location:

1200 Crystal Drive - Unit 711 Washington, DC

Purchase Price 367,500 Settlement Costs
Total Investment 4,854 372,354

Monthly Rent Saved by Owning Annual Savings of Rent 2,200 (2006 -2012) 26,400

Annual Ownership Expenses Monthly (568) Annual Annual Condo Owners Fee (6,816) (1,595) (2,016) (10,427) RE Taxes (133) Management Fee (8% of Rent) (168) Subtotal Utlities paid by Renter

IRR

4.65%

Year	Date	UA - FY Yearly Quarter	Condo. Purchase Amt. Make-Ready	Qirly. Rent Savings by Owning 2006 - 2012	Qtrly. Rent Received 2013 - 2016	"Ownership Costs" RE Taxes, Electric HOA Fees, etc.	Condo Sale Proceeds less Transaction Costs	"IRR Calculation Stack"  Benefits = Money Received Contributions = (Money Expensed)	Avg. Condo Value Appreciation	Avg. Annual Appreciation % As of Sale Date	Applied Appreciation Percentage	Annual Ownership Costs	Avg. Qtrly. Costs
							Costs			leaning the second			
1	30-Sep-06	3rd	(372,354)	2,200				(370,154)	372,354				
	31-Dec-06	4th		6,600		(2,847)		3,753	372,354				
	31-Mar-07	1st		6,600		(1,828)		4,772	372,354	mas/i		0.000	
	30-Jun-07	2nd		6,600		(1,876)		4,724	372,354	0	0.0%	(6,551)	(1,638)
		FY08	***********										
2	30-Sep-07	3rd		6,600	3.53	(1,841)		4,759	372,354				
	31-Dec-07	4th		6,600	•	(2,041)		4,559	372,354				
	31-Mar-08	1st		6,600	-	(3,275)		3,325	372,354				
	30-Jun-08	2nd		6,600		(1,935)		4,665	372,354	0	0.0%	(9,092)	(2,273)
		FY09											
3	30-Sep-08	3rd		6,600		(1,868)		4,732	372,354				
	31-Dec-08	4th		6,600	-	(3,450)		3,150	372,354				
	31-Mar-09	1 st		6,600		(1,772)		4,828	372,354				
	30-Jun-09	2nd		6,600	-	(1,885)		4,715	372,354	0	0.0%	(8,975)	(2,244)
		FY10											
4	30-Sep-09	3rd		6,600	-	(1,822)		4,778	372,354				
	31-Dec-09	4th		6,600		(2,017)		4,583	372,354				
	31-Mar-10	1st		6,600	-	(1,832)		4,768	372,354				
	30-Jun-10	2nd		6,600	-	(1,868)		4,732	372,354	0	0.0%	(7,539)	(1,885)
		FY11											
5	30-Sep-10	3rd		6,600		(1,783)		4,817	372,354				
	31-Dec-10	4th		6,600	-	(1,987)		4,613	372,354				
	31-Mar-11	1 st		6,600	-	(1,817)		4,783	372,354				
	30-Jun-11	2nd		6,600	-	(3,391)		3,209	372,354	39,097	10,5%	(8,978)	(2,244)
		FY12											
6	30-Sep-11	3rd		6,600	-	(1,829)		4,771	411,451				
	31-Dec-11	4th		6,600	-	(2,374)		4,226	411,451				
	31-Mar-12	1st		4,400	-	(2,107)		2,293	411,451				
	30-Jun-12	2nd		5004020000	-	(4,951)		(4,951)	411,451	41,145	10.0%	(11,260)	(2,815)
		FY13											
7	30-Sep-12	3rd				(3,923)		(3,923)	452,596				
	31-Dec-12	4th			-	(1,694)		(1,694)	452,596				
	31-Mar-13	1st				(1,789)		(1,789)	452,596				
	30-Jun-13	2nd	(5,000) *			(2,607)		(7,607)	452,596	0	0.0%	(10,012)	(2,503)
	ari bilinis	FY14							15			2 21 1	203 3
8	30-Sep-13	3rd 1st 2nd				(2,607)	416,389	413,782 **					
	Totals	ZIIQ	(\$377,354)	\$ 145,200	s -	(65,014)	\$ 416,389	119,220		80,242.29			

IRR 4.65%

Make-Ready Costs for Rental or Sale
 Realtor's Fee & Closing Costs of 8% subtracted from Sales Price

# INTERNAL RATE OF RETURN ANALYSIS (10yr IRR Actual Costs)

 Property Name:
 1200 Crystal Drive - Unit 711

 Location:
 Washington, DC

 Purchase Price
 367,500

 Purchase Price
 367,500

 Settlement Costs
 4,854

 Total Investment
 372,354

Monthly Rent Saved by Owning 2,200
Annual Savings of Rent 26,400 (2006 -2012)

IRR 7.38%

Monthly	Annual
(568)	(6,816)
(130)	(1,565)
(176)	(2,112)
(874)	(10,493)
	(568) (130) (176)

		UA - FY Yearly	Condo. Purchase Amt.	Qtrly. Rent Savings by Owning	Qtrly. Rent Received	"Ownership Costs" RE Taxes, Electric	Condo Sale Proceeds less	"IRR Calculation Stack" Benefits = Money Received	Avg. Condo Value	Avg. Annual Appreciation % As of Sale Date	Applied Appreciation	Annual Ownership	Avg. Qirly.
Year	Date	Quarter		2006 2012	2013 - 2016	HOA Fees, etc.	Transaction Costs	n Contributions = (Money Expensed)	Appreciation	6.2%	Percentage	Costs	Costs
1	30-Sep-06	3rd	(372,354)	2,200				(370,154)	372,354				
	31-Dec-06	4th		6,600		(2,847)		3,753	372,354				
	31-Mar-07	1st		6,600		(1,828)		4,772	372,354				
	30-Jun-07	2nd FY08		6,600	12 <b>.</b> 00	(1,876)		4,724	372,354	0	0.0%	(6,551)	(1,638)
2	30-Sep-07	3rd		6,600	•	(1,841)		4,759	372,354				
	31-Dec-07	4th		6,600	*	(2,041)		4,559	372,354				
	31-Mar-08	1st		6,600	•	(3,275)		3,325	372,354			40.000	(2.072)
	30-Jun-08	2nd FY09		6,600		(1,935)		4,665	372,354	0	0.0%	(9,092)	(2,273)
3	30-Sep-08	3rd		6,600		(1,868)		4,732	372,354				
	31-Dec-08	4th		6,600	(=)	(3,450)		3,150	372,354				
	31-Mar-09	1st		6,600	-	(1,772)		4,828	372,354	0	0.0%	(9.075)	(2.211)
**	30-Jun-09	2nd FY10		6,600		(1,885)		4,715	372,354	U	0.070	(8,975)	(2,244)
4	30-Sep-09	3rd		6,600		(1,822)		4,778	372,354				
	31-Dec-09	4th		6,600	-	(2,017)		4,583	372,354 372,354				
	31-Mar-10	1st		6,600	-	(1,832)		4,768 4,732	372,354	0	0.0%	(7,539)	(1,885)
	30-Jun-10	2nd FY11		6,600		(1,868)				U	0.078	(1,339)	(1,003)
5	30-Sep-10	3rd		6,600		(1,783)		4,817	372,354				
	31-Dec-10	4th		6,600	-	(1,987)		4,613	372,354				
	31-Mar-11 30-Jun-11	1st 2nd		6,600 6,600		(1,817) (3,391)		4,783 3,209	372,354 372,354	20.007	10.5%	(8,978)	(2,244)
		FY12	E LUCIO DE LA CALLESTICA							39,091	10.570	(8,778)	(2,211)
6	30-Sep-11	3rd		6,600	120	(1,829)		4,771	411,451				
	31-Dec-11	4th		6,600	1,72	(2,374)		4,226	411,451				
	31-Mar-12	1st		4,400		(2,107)		2,293 (4,951)	411,451 411,451	41.145	10.0%	(11,260)	(2,815)
	30-Jun-12	FY13				(4,951)				41,143	10.078	(11,200)	(2,013)
7	30-Sep-12	3rd			•	(3,923)		(3,923)	452,596 452,596				
	31-Dec-12 31-Mar-13	4th			! <del>•</del> !	(1,694) (1,789)		(1,694) (1,789)	452,596				
	30-Jun-13	1st 2nd	(5,000) *		2,200	(2,623)		(5,423)	452,596	45 260	10.0%	(10,029)	(2,507)
		FY14	(5,000)							15,200	10.070	(10,027)	(5,507)
8	30-Sep-13	3rd			6,600	(2,623)		3,977 3,977	497,856				
	31-Dec-13 31-Mar-14	4th 1st			6,600 6,600	(2,623) (2,623)		3,977	497,856 497,856				
	30-Jun-14	2nd			6,600	(2,623)		3,977	497,856	40 786	10.0%	(10,493)	(2,623)
		FY15								42,700	10.070	(10,475)	(2,025)
9	30-Sep-14	3rd	NEW STATE OF		6,600	(2,623)		3,977	547,642				
	31-Dec-14 31-Mar-15	4th 1st			6,600 6,600	(2,623)		3,977 3,977	547,642 547,642				
	31-Mar-15 30-Jun-15	2nd	Pinales P		6,600	(2,623) (2,623)		3,977	547,642	51 761	10.0%	(10,493)	(2,623)
	20-Jun-13	FY16			0,000	(2,023)		5,511		34,704	10,070	(10,773)	(2,023)
10	30-Sep-15	3rd			6,600	(2,623)		3,977	602,406				
	31-Dec-15	4th 1st	(5,000) *			(2,623)	554,213	546,590 *	* 602,406				
		2nd											
	Totals		(\$382,354)	\$ 145,200	\$ 61,600	(88,656)	\$ 554,213	290,003	•	230,051.66			

<sup>\*</sup> Make-Ready Costs for Rental or Sale

IRR 7.38%

<sup>\*\*</sup> Realtor's Fee & Closing Costs of 8% subtracted from Sales Price

# INTERNAL RATE OF RETURN ANALYSIS (15yr IRR Actual Costs)

Property Name:

1200 Crystal Drive - Unit 711

Location:

Washington, DC

Purchase Price

367,500

Settlement Costs Total Investment 4,854 372,354

Monthly Rent Saved by Owning Annual Savings of Rent

2,200 (2006 -2012) 26,400

Annual Ownership Expenses Monthly (568) (130) (176) (874) Annual (6,816) (1,565) (2,112) (10,493) Annual Condo Owners Fee RE Taxes Management Fee (8% of Rent) Utlities paid by Renter

IRR 7.53%

		UA - FY	Condo. Purchase	Qtrly. Rent Savings by Owning	Qtrly. Rent Received	"Ownership Costs" RE Taxes,	Condo Sale Proceeds less	"IRR Calculation Stack" Benefits = Money	Avg. Condo Value	Avg. Annual Appreciation % As of Sale Date	Applied Appreciation	Annual	Avg.
Year	Date	Yearly Quarter	Amt. Make-Ready	2006 - 2012	2013 - 2016	Electric HOA Fees, etc.		Received Contributions = (Money Expensed)	Appreciation	6.2%	Percentage	Ownership Costs	Qtrly. Costs
1	30-Sep-06	3rd	(372,354)	2,200				(370,154)	372,354				
	31-Dec-06	4th		6,600		(2,847)		3,753	372,354				
	31-Mar-07	1st		6,600		(1,828)		4,772	372,354				
	30-Jun-07	2nd FY08	-	6,600		(1,876)		4,724	372,354	0	0.0%	(6,551)	(1,638)
2	30-Sep-07	3rd		6,600		(1,841)		4,759	372,354				
•	31-Dec-07	4th		6,600	: :	(2,041)		4,559	372,354				
	31-Mar-08	1st		6,600	-	(3,275)		3,325	372,354				
	30-Jun-08	2nd		6,600	•	(1,935)		4,665	372,354	0	0.0%	(9,092)	(2,273)
3	30-Sep-08	FY09 3rd	DOMESTIC OF THE PARTY OF THE PA	6,600	-	(1,868)		4,732	372,354				
3	31-Dec-08	4th		6,600		(3,450)		3,150	372,354				
	31-Mar-09	1st		6,600	523	(1,772)		4,828	372,354				
	30-Jun-09	2nd		6,600		(1,885)		4,715	372,354	0	0.0%	(8,975)	(2,244)
		FY10											
4	30-Sep-09	3rd		6,600	-	(1,822)		4,778	372,354				
	31-Dec-09	4th		6,600		(2,017)		4,583	372,354				
	31-Mar-10 30-Jun-10	1st 2nd		6,600 6,600	•	(1,832) (1,868)		4,768 4,732	372,354 372,354	0	0.0%	(7,539)	(1,885)
	30-3011-10	FY11	Production of the last	0,000	5. <del>5</del> 7/	(1,000)		4,752	312,334	v	0.070	(1,557)	(1,000)
5	30-Sep-10	3rd		6,600	0.00	(1,783)		4,817	372,354				
	31-Dec-10	4th		6,600	(2)	(1,987)		4,613	372,354				
	31-Mar-11	1 st	S SOLL S	6,600	573	(1,817)		4,783	372,354				
	30-Jun-11	2nd		6,600	-	(3,391)		3,209	372,354	39,097	10.5%	(8,978)	(2,244)
6	30-Sep-11	FY12 3rd		6,600		(1,829)		4,771	411,451				
· ·	31-Dec-11	4th		6,600	7.4	(2,374)		4,226	411,451				
	31-Mar-12	1st		4,400	-	(2,107)		2,293	411,451				
	30-Jun-12	2nd			127	(4,951)		(4,951)	411,451	41,145	10.0%	(11,260)	(2,815)
7	30-Sep-12	FY13 3rd				(3,923)		(3,923)	452,596				
,	31-Dec-12	4th				(1,694)		(1,694)	452,596				
	31-Mar-13	1st			(=)	(1,789)		(1,789)	452,596				
	30-Jun-13	2nd	(5,000)		2,200	(2,623)		(5,423)	452,596	45,260	10.0%	(10,029)	(2,507)
8	20 Cap 12	FY14 3rd			6,600	(2,623)		3,977	497,856				
٥	30-Sep-13 31-Dec-13	4th			6,600	(2,623)		3,977	497,856				
	31-Mar-14	lst			6,600	(2,623)		3,977	497,856				
	30-Jun-14	2nd			6,600	(2,623)		3,977	497,856	49,786	10.0%	(10,493)	(2,623)
_		FY15	Encourage and a second			(2.422)		2.022	212712				
9	30-Sep-14 31-Dec-14	3rd 4th			6,600 6,600	(2,623) (2,623)		3,977 3,977	547,642 547,642				
	31-Mar-15	1st			6,600	(2,623)		3,977	547,642				
	30-Jun-15	2nd			6,600	(2,623)		3,977	547,642	54,764	10.0%	(10,493)	(2,623)
		FY16											
10	30-Sep-15	3rd			6,600	(2,623)		3,977	602,406				
	31-Dec-15 30-Mar-16	4th 1st			6,600 6,600	(2,623) (2,623)		3,977 3,977	602,406 602,406				
	29-Jun-16	2nd			6,600	(2,623)		3,977	602,406	60,241	10.0%	(10,493)	(2,623)
		FY17											
11	29-Sep-16	3rd			6,600	(2,623)		3,977	662,646				
	30-Dec-16	4th			6,600	(2,623)		3,977	662,646				
	30-Mar-17 29-Jun-17	1st			6,600 6,600	(2,623)		3,977 3,977	662,646 662,646	66 265	10.0%	(10,493)	(2,623)
	Z3-Jun-17	2nd FY18			6,600	(2,623)		3,311	002,040	00,203	10.070	(10,455)	(2,023)
12	29-Sep-17	3rd			6,600	(2,623)		3,977	728,911				
100000	30-Dec-17	4th			6,600	(2,623)		3,977	728,911				
	30-Mar-18	1st			6,600	(2,623)		3,977	728,911	75-75-15-68-1-11		,,	(2
	29-Jun-18	2nd			6,600	(2,623)		3,977	728,911	21,867	3.0%	(10,493)	(2,623)
13	29-Sep-18	FY19 3rd			6,600	(2,623)		3,977	750,778				
1.5	30-Dec-18	4th			6,600	(2,623)		3,977	750,778				
	30-Mar-19	1st			6,600	(2,623)		3,977	750,778				
	29-Jun-19	2nd			6,600	(2,623)		3,977	750,778	22,523	3,0%	(10,493)	(2,623)
904	20 0 10	FY20	PAGE STREET			(2 (22)		2.077	772 203				
14	29-Sep-19 30-Dec-19	3rd 4th			6,600 6,600	(2,623) (2,623)		3,977 3,977	773,302 773,302				
	30-1000-19	aur			0,000	(2,023)		3,711	115,502				

# INTERNAL RATE OF RETURN ANALYSIS

(15yr IRR Actual Costs)

IRR

7.53%

		UA - FY	Condo.	Qtrly. Rent	Qtrly.	"Ownership Costs"	Condo Sale Proceeds	"IRR Calculation Stack"	Avg. Condo	Avg. Annual Appreciation %	Applied		
		Yearly Quarter	Purchase Amt.	Savings by Owning 2006 - 2012	Rent Received 2013 - 2016	RE Taxes, Electric HOA Fees, etc.	less Transaction	Benefits = Money Received Contributions =	Value Appreciation	As of Sale Date	Appreciation Percentage	Annual Ownership Costs	Avg. Qtrly. Costs
Year	Date	Quarter	Make-Ready	2000 - 2012	2013 - 2016	noa rees, etc.		(Money Expensed)	Прриссии	6.2%	Teretainge	600.5	Costs
	29-Mar-20	1st			6,600	(2,623)		3,977	773,302				
	28-Jun-20	2nd FY21			6,600	(2,623)		3,977	773,302	23,199	3.0%	(10,493)	(2,623
15	28-Sep-20	3rd			6,600	(2,623)		3,977	796,501				
	29-Dec-20	4th			6,600	(2,623)		3,977	796,501				
	29-Mar-21	1st	(5,000) *			(2,623)		(7,623)	796,501				
	28-Jun-21	2nd				(2,623)	732,781	730,157	796,501	0	0.0%	(10,493)	(2,623
	Totals		(\$382,354)	\$ 145,200	\$ 200,200	(146,368)	\$ 732,781	549,459		424,146.56			

Make-Ready Costs for Rental or Sale
 Realtor's Fee & Closing Costs of 8% subtracted from Sales Price

About Us



#### Forecasts, charts and analysis...

Interest Rate Forecast Stock Market Forecast

Real Estate Forecast

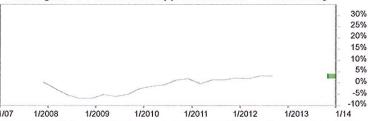
**Exchange Rate Forecast** 

**Economic Forecast** 

# **Washington DC Real Estate Forecast**

# Washington DC Real Estate Forecast Target Month Forecast HDTFA Sept, 2013 3.0% 5.3% Forecast: Annual real estate appreciation rate for single family homes in the Washington DC residential housing market for the 12 months ending in the target month shown at the left.

#### Washington - DC Real Estate Appreciation Rate - 5 Year History



Average annual Washington DC house appreciation RATE according to the <u>House Price Index</u> (HPI) is shown in gray. The forecast for annual appreciation through the target month is shown in green.

Washington DC Real Estate Forecast
Home Values Appreciation Rate - US Cities
50 State Home Appreciation Rate Table

Washington DC House Price Index: 33 Year Chart
DC Home Price Appreciation Rate: 33 Yr. Graph

#### Forecast & Real Estate Commentary

Commentary 11438

3rd Quarter, 2012 Data: Washington DC

The 12 month forecast for Washington DC Real Estate prices is in the table at the top of this page. Forecast-Chart.com is forecasting a rise in Washington DC Home Prices of 3.04%. The table shows a HDTFA of 5.32% which suggests that appreciation rates over the next year for Washington DC Real Estate could easily end up anywhere between 8.36% and -2.29%. Links to Forecasts for 49 other states and the District of Columbia may be found on the right side of this page.

The average real estate forecast for all 50 states is 0.17%. So Washington DC Real Estate prices are forecasted to outperform the rest of the country. The highest appreciation rate forecast of all Real estate forecasts at this site is 5.65% for Arizona. The lowest is -4.46% for Georgia.

Historical Home Price Appreciation: Washington DC

 Last Quarter
 1.34%

 Last Year
 3.5%

 Last 5 Years
 -6%

 Last 10 Years
 76%

 Last 20 Years
 201%

 Decline From All Time High
 5.52%

Annual Home Price Appreciation Rates: Washington DC

1982 -4.52% 1983 1.35% 1984 7.50% 1985 5.08% 1986 12.54% 1987 13.80% 1988 17.14% 9.50% 1989 1990 0.91% 1991 2.49%

1992	0.57%	Like
1993	0.17%	Constitution ()
1994	-6.67%	
1995	5.57%	
1996	-1.50%	
1997	0.25%	
1998	8.51%	
1999	9.45%	
2000	14.08%	
2001	16.54%	
2002	15.14%	
2003	13.19%	
2004	22.67%	
2005	22.74%	
2006	5.59%	
2007	-0.24%	
2008	-7.28%	
2009	-1.99%	
2010	0.75%	
2011	1.59%	

The highest annual appreciation rate in Washington DC Real Estate was 27% in the twelve months ended with the 2nd Quarter of 1978. The worst annual appreciation rate in Washington DC was -13% in the twelve months ended with the 1st Quarter of 1982.

The highest appreciation in Washington DC Real Estate over a three year period was 81% in the three years ended with the 2nd Quarter of 1979. The worst appreciation over a three year period in Washington DC was -11% in the three years ended with the 1st Quarter of 2010.

This page provides a five year chart of appreciation rates and a forecast for the Washington DC House Price Index. The chart shows the five years ended in the 3rd Quarter of 2012. For links to longer term charts, look at the links under the five year chart (above). One link opens a chart showing over thirty years of historical appreciation rates for Washington DC Real Estate. Another opens a graph showing over thirty years of the Washington DC House Price Index. Just one glance at our long term charts can provide tremendous insight into the historical trends of residential property values. And those pages contain more than just charts. You'll find a wealth of other helpful statistics about Washington DC Real Estate.

Historical data on the Washington DC House Price Index is available back to the first quarter of 1975. All calculations are based on the quarterly value of the House Price Index for Washington DC.

In this site, you may view the one, five & ten year home appreciation rates for Washington DC and the other 49 states in one convenient table. Click the 50 State Home Appreciation Rate Table link above. The link is under the Washington DC Real Estate Appreciation Rate Chart at the top of this page. You'll see a snapshot of historical Home Prices for Washington DC as compared to U.S. home appreciation rates.

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