

Investment Analyst Case Study

Iron Bank Real Estate Investors

“The Lyric” (215 10th Ave E)

Seattle-Tacoma-Bellevue Metro

OVERVIEW

The Lyric (“Property”) is being offered for sale with an asking price of **\$120 million**. The Iron Bank Investment Committee is expecting a 2-page proposal from you that includes both a **recommendation and an assessment** regarding the potential acquisition of The Lyric.

Your 2-page proposal should answer the following questions:

- What is the most you would recommend paying for this property? Is the \$120 million asking price appropriate?
- What are the strengths, weaknesses, and opportunities of this investment?
- How could you mitigate the downside risk in this investment?
- In what areas would you need to perform additional due diligence before making a decision?

In addition to this written proposal, you should also submit an Excel model that includes your analysis and responses to the questions at the end of this case study. These questions are **SEPARATE** from the 2-page proposal above, and you must answer them separately.

You should submit an electronic copy of your proposal, your Excel file, and your responses to the case study questions within **1 week** of receiving this case study.

PROPERTY SUMMARY

The Lyric (215 10th Ave E in Seattle, Washington in the United States) is a 7-story, 234-unit apartment building in the Seattle-Tacoma-Bellevue metro area. It was built in 2012 and is currently 97% occupied. It has a unit mix consisting of 15% studios, 40% 1-bedroom units, and 45% 2-bedroom units.

Unit amenities include custom self-closing cabinets, stainless steel and energy-efficient appliances, granite countertops, private balconies and patios, sunken kitchen sinks, vessel bathroom sinks, walk-in closets, floor-to-ceiling windows, front-load washers and dryers, and air conditioning.

Community amenities include a rooftop deck with views of Seattle and Mt. Rainier, a dog run and resident sky lounge, a high-tech theater, a state-of-the-art fitness center, underground parking, a gated electronic entrance, a multi-purpose media / gaming room, building-wide WiFi, a recycling center, and on-site management and concierge services.

There are 361 underground parking spaces at the Property.

PROPERTY LOCATION

The Property is located in Capitol Hill, one of the most densely populated and fastest-growing areas of the Seattle-Tacoma-Bellevue metro area.

The location provides convenient access to transportation, including the I-5, I-90, SR-520 and SR-99. Additionally, the Property is one block north of a future Capitol Hill Light Rail Station that will serve the area.

It also provides easy office access for staff members of the four biggest employers in the region: Boeing, Microsoft, the University of Washington, and Amazon. The Seattle-Tacoma International Airport is 15 miles south on the I-5.

Additionally, the Property is within walking distance of Seattle University, Seattle Central Community College, the Swedish Medical Center, and three shopping and dining hubs: Broadway, Fifteenth, and the Pike-Pine Corridor.

MARKET DESCRIPTION

The Seattle-Tacoma-Bellevue metro area has been one of the fastest-growing areas in the US, with over 57,000 new residents in the past year.

The key renter demographic of 20-34-year-olds represented 28% of Seattle's population and increased by 2.5% last year; it is expected to grow by 10% over the next five years.

The population in the metropolitan area also tends to be highly educated, with a median household income of \$70,272, compared to a national median household income of \$51,939. The area also has an unemployment rate of 3.9%, compared to the national unemployment rate of 5.5%.

The entire Seattle-Tacoma-Bellevue metro area has seen strong residential performance with respect to occupancy and rental rates over the past several years.

This performance is due to the growth of large employers such as Amazon and Microsoft, other companies opening or expanding their Seattle offices, and significantly more high-quality apartment units becoming available each year. Over 49,000 new jobs were added in the past year, up from 17,000 new jobs in 2010.

The region's new apartment units, going back to 1900 and projected to 2018 based on properties currently under construction, are shown below:



The Lyric is in a highly developed office submarket, which includes over 33 million square feet of office space within a 5-mile radius.

Additionally, Capitol Hill alone has 6 million square feet of office space less than one mile from the Property, with a 6% vacancy rate and average gross rents of \$37 per square foot, compared to a 10-12% vacancy rate and \$30 per square foot averages for King County as a whole.

Amazon just announced plans to lease 817,000 square feet of office space currently under construction in the Troy Block in the South Lake Union area; it is also constructing a 3.3 million square foot project near downtown, and is expected to have enough office space in Seattle by 2019 to house 70,000 employees.

Amazon has grown its employee count from 33,700 at the end of 2010 to 154,100 in 2014; Microsoft has grown from 89,000 to 128,000; and Boeing has grown from 161,000 to 165,500 in that same time period.

As a result of these underlying fundamentals, the pace of new apartment construction has been rapid.

Within the Capitol Hill neighborhood, apartment construction has accelerated even more rapidly: there were only 8 developments in 2011, but that climbed to 30 by the end of 2012, and there are currently 50 apartment buildings under development within a 2-mile radius of the Property (for a total of 4,700 units). There are more than 90 planned or permitted projects in the area.

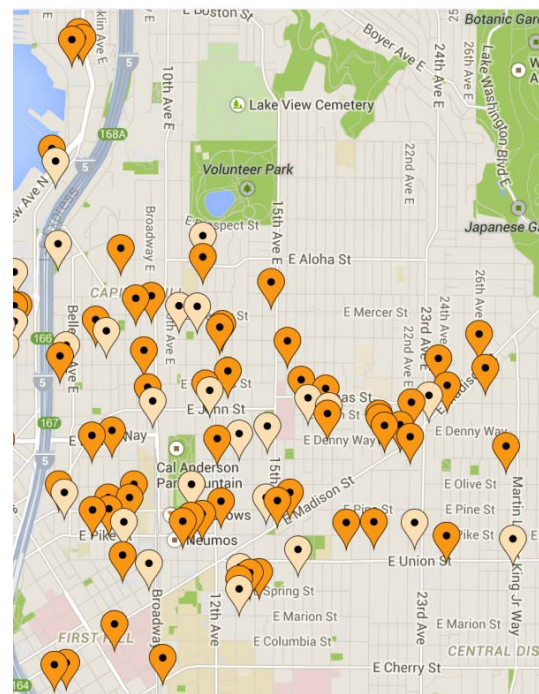
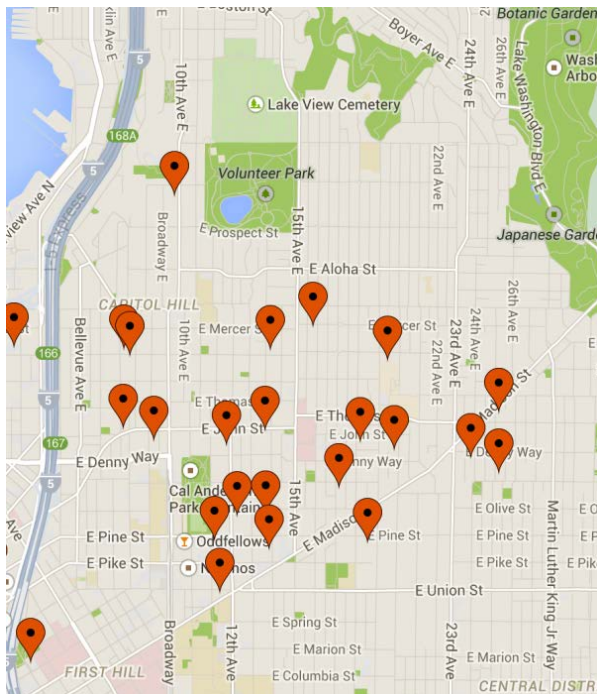
These developments are expected to result in 1,326 new apartment units in 2015, as well as 682 new units in 2016 and 738 in 2017 (for comparison, 778 new units opened in 2014). In the greater Seattle region, 56,721 apartment units are expected by 2019.

Despite this supply growth, the average rent in Capitol Hill rose by 7.4% last year, with the average rent in the greater Seattle area increasing by 5.4%.

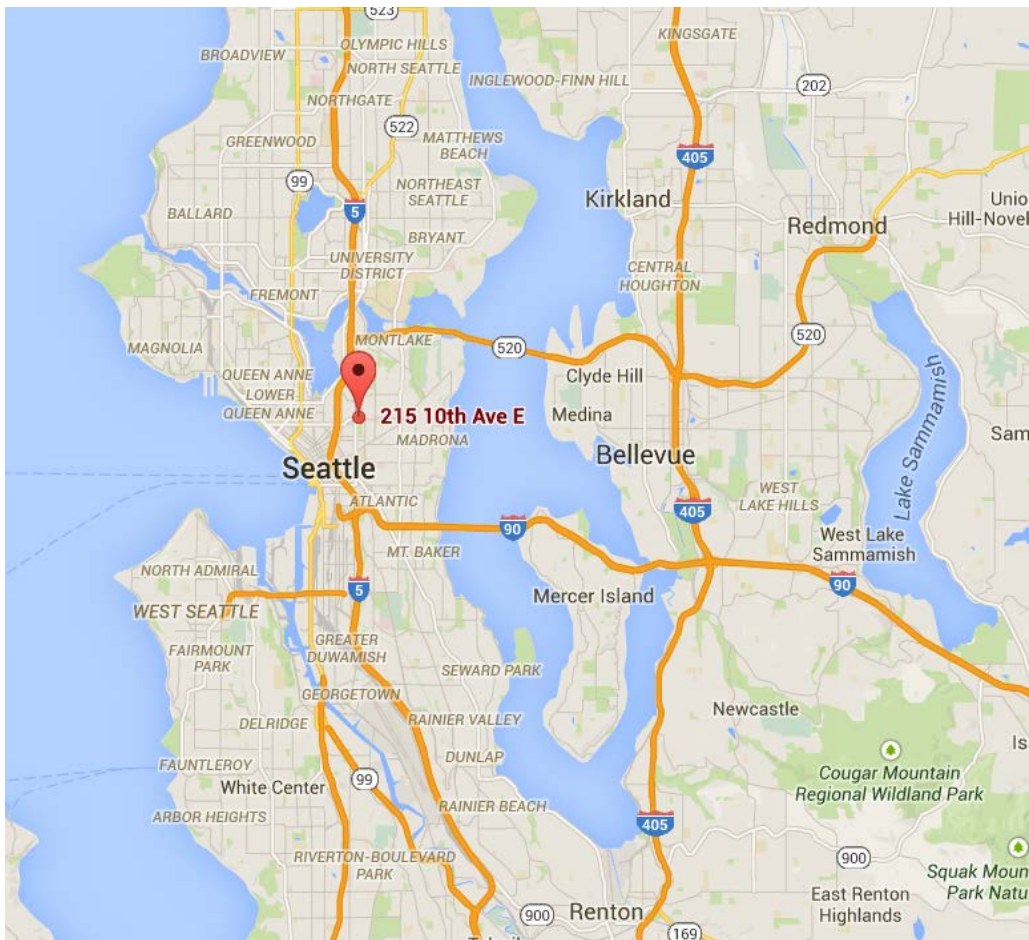
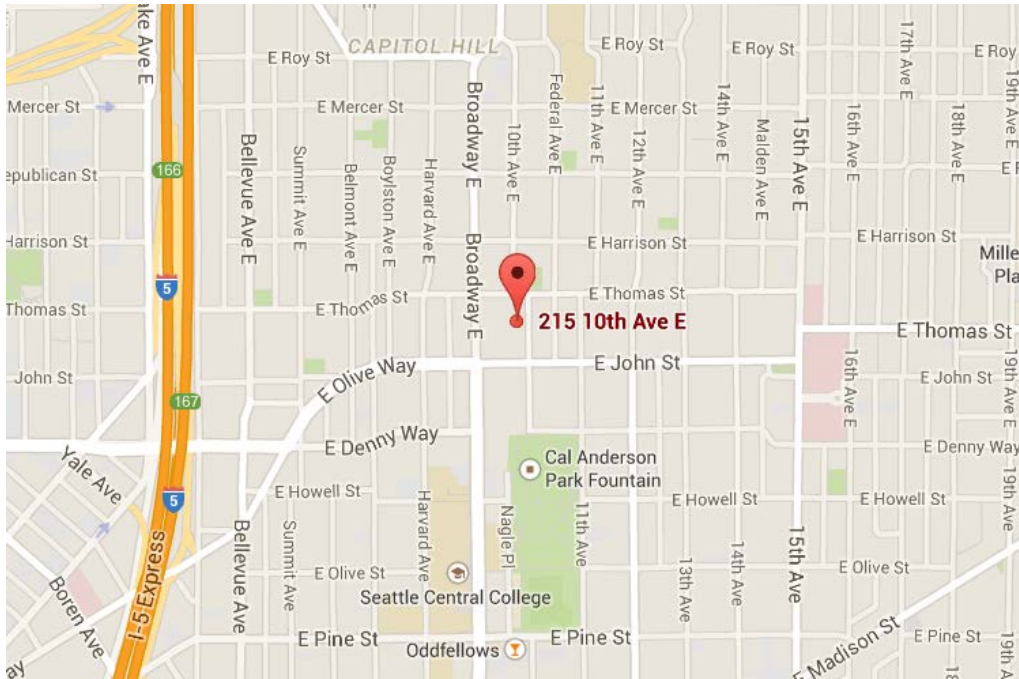
Competitive properties currently under development near The Lyric include:

- A 248-unit apartment complex near Seattle University with a hotel-style lobby area, a central courtyard, and 12,500 square feet of retail space.
- A 135-unit 6-story apartment complex with an underground parking facility and 6,000 square feet of commercial space.
- A 260-unit 7-story apartment complex at Harvard and Pine, currently being converted from a former BMW dealership.
- A 300-unit apartment complex with 20,000 square feet of retail space (currently being converted from a former Mercedes Benz dealership).

The images below show apartment complex near the Property completed within the past year (left) and planned or permitted projects in the area (right):



MAPS



PHOTOS



UNIT MIX

Unit Mix for The Lyric (215 10th Ave E)

Type:	# Units:	% Mix:	Unit SF:	Total SF:	Market Rent per Unit:	Market Rent per SF:	Effective Rent per Unit: ⁽¹⁾	Effective Rent per SF: ⁽¹⁾
Studio - A1	5	2%	456	2,280	\$ 1,550	\$ 3.40	\$ 1,540	\$ 3.38
Studio - A2	10	4%	460	4,600	1,550	3.37	1,540	3.35
Studio - A3	10	4%	547	5,470	1,595	2.92	1,580	2.89
Studio - A4	2	1%	450	900	1,495	3.32	1,485	3.30
Studio - A5	2	1%	540	1,080	1,650	3.06	1,640	3.04
Studio - A6	5	2%	580	2,900	1,800	3.10	1,790	3.09
Total / Average Studio:	34	15%	507	17,230	\$ 1,603	\$ 3.16	\$ 1,591	\$ 3.14
1 BR / 1 BH - A1	2	1%	550	1,100	\$ 1,900	\$ 3.45	\$ 1,875	\$ 3.41
1 BR / 1 BH - A2	2	1%	620	1,240	2,250	3.63	2,230	3.60
1 BR / 1 BH - A3	10	4%	615	6,150	2,125	3.46	2,125	3.46
1 BR / 1 BH - A4	6	3%	515	3,090	2,010	3.90	1,990	3.86
1 BR / 1 BH - B1	4	2%	605	2,420	2,110	3.49	2,090	3.45
1 BR / 1 BH - B2	8	3%	605	4,840	1,925	3.18	1,905	3.15
1 BR / 1 BH - B3	15	6%	645	9,675	2,295	3.56	2,285	3.54
1 BR / 1 BH - B4	10	4%	685	6,850	2,185	3.19	2,185	3.19
1 BR / 1 BH - C1	4	2%	811	3,244	2,475	3.05	2,450	3.02
1 BR / 1 BH - C2	8	3%	790	6,320	2,300	2.91	2,275	2.88
1 BR / 1 BH - C3	15	6%	850	12,750	2,760	3.25	2,750	3.24
1 BR / 1 BH - C4	2	1%	790	1,580	2,475	3.13	2,450	3.10
1 BR / 1 BH - C5	4	2%	823	3,292	2,595	3.15	2,585	3.14
1 BR / 1 BH - C6	4	2%	833	3,332	2,505	3.01	2,480	2.98
Total / Average 1 BR / 1 BH:	94	40%	701	65,883	\$ 2,306	\$ 3.29	\$ 2,293	\$ 3.27
2 BR / 1 BH - C5	10	4%	845	8,450	\$ 2,810	\$ 3.33	\$ 2,790	\$ 3.30
2 BR / 1 BH - C6	5	2%	855	4,275	2,925	3.42	2,905	3.40
2 BR / 1 BH - C7	10	4%	975	9,750	3,160	3.24	3,150	3.23
2 BR / 1 BH - C8	10	4%	890	8,900	2,985	3.35	2,975	3.34
2 BR / 1 BH - D1	1	0%	865	865	2,675	3.09	2,665	3.08
2 BR / 1 BH - D2	10	4%	884	8,840	2,830	3.20	2,830	3.20
2 BR / 1 BH - D3	5	2%	925	4,625	2,985	3.23	2,975	3.22
2 BR / 1 BH - D4	5	2%	915	4,575	2,745	3.00	2,735	2.99
Total / Average 2 BR / 1 BH:	56	24%	898	50,280	\$ 2,925	\$ 3.26	\$ 2,914	\$ 3.25
2 BR / 2 BH - D1	2	1%	915	1,830	\$ 2,810	\$ 3.07	\$ 2,800	\$ 3.06
2 BR / 2 BH - D2	10	4%	915	9,150	2,823	3.08	2,805	3.07
2 BR / 2 BH - D3	5	2%	875	4,375	2,650	3.03	2,640	3.02
2 BR / 2 BH - D4	10	4%	1,025	10,250	2,975	2.90	2,950	2.88
2 BR / 2 BH - E1	5	2%	992	4,960	2,990	3.01	2,975	3.00
2 BR / 2 BH - E2	5	2%	1,142	5,710	3,195	2.80	3,175	2.78
2 BR / 2 BH - E3	8	3%	1,134	9,072	3,628	3.20	3,605	3.18
2 BR / 2 BH - E4	5	2%	1,495	7,475	4,035	2.70	4,015	2.69
Total / Average 2 BR / 2 BH:	50	21%	1,056	52,822	\$ 3,139	\$ 2.97	\$ 3,120	\$ 2.95
GRAND TOTAL / AVERAGE:	234	100%	796	186,215	\$ 2,530	\$ 3.18	\$ 2,516	\$ 3.16

(1) Effective Rent is the current Asking Rent minus discounts and rental concessions (e.g., free months of rent or other free amenities).

COMPARABLES – COMPETITIVE PROPERTIES

Comparable Properties for The Lyric (215 10th Ave E)

Property Name:	Address:	Neighborhood:	Year Built:	# Units:	# Square Feet:	Avg. Unit Size in SF:	Market Rent per Unit:	Market Rent per SF:	Effective Rent per Unit:	Effective Rent per SF:	Occupancy Rate:	% Concessions:	Comments:
Joule	523 Broadway Avenue E	Capitol Hill	2010	295	222,430	754	\$ 2,500	\$ 3.32	\$ 2,500	\$ 3.32	97%	0%	Similar amenities; 5 levels of underground parking; 26,000 retail SF.
The Broadway Building	1641 Nagle Place	Capitol Hill	2010	94	61,100	650	1,450	2.23	1,400	2.15	92%	3%	Inferior amenities; mixed office/retail space.
Citizen	1222 E Madison Street	Capitol Hill	2012	107	64,414	602	1,450	2.41	1,425	2.37	97%	2%	Inferior amenities; 59 parking spots; 6,000 retail SF.
Chloe	1408 E Union Street	Capitol Hill	2011	117	80,561	689	1,650	2.40	1,550	2.25	92%	6%	Similar amenities; inferior location.
Pearl	1530 15th Avenue	Capitol Hill	2008	80	48,160	602	1,705	2.83	1,625	2.70	90%	5%	Inferior amenities; similar location.
Packard	1530 12th Avenue	Capitol Hill	2009	61	45,124	740	1,850	2.50	1,820	2.46	93%	2%	Similar amenities; lacks 2BR units.
Terravita Luxury	1615 Belmont Avenue	Capitol Hill	2012	108	76,140	705	1,950	2.77	1,950	2.77	95%	0%	Similar amenities; similar location.
REO Flats	1525 14th Avenue	Capitol Hill	2014	108	60,800	563	1,950	3.46	1,900	3.38	93%	3%	Similar amenities; similar location.
Sunset Electric	1111 E Pine Street	Capitol Hill	2014	92	71,213	774	2,300	2.97	2,300	2.97	96%	0%	Similar amenities; similar location.
Gatsby	1145 10th Avenue E	Capitol Hill	2014	70	56,035	801	2,350	2.94	2,325	2.90	98%	1%	Superior amenities; inferior location.
Total or Average:			2011	1,132	785,977	694	2,004	\$ 2.89	\$ 1,974	\$ 2.84	95%	2%	
Median:			2012	101	62,757	697	1,900	\$ 2.80	\$ 1,860	\$ 2.73	94%	2%	

Property Name:	Address:	Neighborhood:	Studio:	1BR:	2BR:	Total:
Joule	523 Broadway Avenue E	Capitol Hill	25%	60%	15%	100%
The Broadway Building	1641 Nagle Place	Capitol Hill	28%	63%	9%	100%
Citizen	1222 E Madison Street	Capitol Hill	26%	74%	0%	100%
Chloe	1408 E Union Street	Capitol Hill	21%	52%	27%	100%
Pearl	1530 15th Avenue	Capitol Hill	31%	69%	0%	100%
Packard	1530 12th Avenue	Capitol Hill	20%	80%	0%	100%
Terravita Luxury	1615 Belmont Avenue	Capitol Hill	31%	57%	11%	100%
REO Flats	1525 14th Avenue	Capitol Hill	10%	80%	10%	100%
Sunset Electric	1111 E Pine Street	Capitol Hill	21%	67%	12%	100%
Gatsby	1145 10th Avenue E	Capitol Hill	0%	61%	39%	100%
Average:			21%	66%	12%	100%

COMPARABLE APARTMENT SALES

Comparable Property Sales for The Lyric (215 10th Ave E)

Property Name:	Address:	Neighborhood:	# Units:	# Square Feet:	Avg. Unit Size in SF:	Year Built:	Sale Date:	Sale Price:	Price per Unit:	Price per SF:	Cap Rate:
Alcyone	301 Minor Avenue N	South Lake Union	161	120,577	749	2004	2014-12-17	\$ 60,950,000	\$ 378,571	\$ 505.49	4.70%
The Martin Seattle	2105 5th Avenue	Belltown	188	189,708	1,009	2012	2014-10-08	113,471,816	603,573	598.14	4.70%
Panorama	1100 University Street	First Hill/Yesler Terrace	179	172,000	961	1962	2014-09-05	74,000,000	413,408	430.23	2.40%
Gatsby	1145 10th Avenue E	Capitol Hill	70	56,035	801	2014	2014-08-07	35,600,000	508,571	635.32	4.20%
Collins on Pine	1222 E Pine Street	Capitol Hill	76	57,167	752	2013	2014-05-21	29,600,000	389,474	517.78	4.50%
Three20	320 E Pine Street	Capitol Hill	134	83,734	625	2014	2014-05-16	36,109,577	269,474	431.24	4.10%
Joseph Arnold Lofts	62 Cedar Street	Belltown	132	99,880	757	2013	2014-04-28	68,500,000	518,939	685.82	4.10%
Balfour Place	1820 Minor Avenue	Denny Triangle	200	97,080	485	1993	2014-03-26	23,130,000	115,650	238.26	6.54%
Bell 206	206 Bell Street	Downtown	122	75,182	616	2012	2013-11-05	41,200,000	337,705	548.00	4.73%
Moda Apartments	2312 3rd Avenue	Downtown	251	122,730	489	2011	2013-07-18	61,968,800	246,888	504.92	5.10%
Aspira	1823 Terry Avenue	Belltown	325	308,750	950	2010	2012-11-01	165,700,000	509,846	536.68	3.95%
Median:			161	99,880	752	2012	2014-05-16	\$60,950,000	\$ 389,474	\$ 517.78	4.50%

MARKET & SUBMARKET STATISTICS

Sales, delivery, and Cap Rate data for the Seattle metro area for 50+ unit sales is shown below:

	2009	2010	2011	2012	2013	2014
Number of Sales	10	29	38	71	52	80
Total Sales Volume	\$192M	\$545.6M	\$1.0B	\$2.1B	\$1.7B	\$2.6B
Average PPU	\$122,328	\$130,171	\$139,630	\$167,123	\$206,672	\$193,804
Average PPSF	\$141	\$150	\$169	\$188	\$233	\$238
Average Cap Rate	6.8%	5.9%	5.7%	5.5%	5.3%	5.3%
Total Deliveries	4,736	3,686	1,318	4,426	5,986	8,128

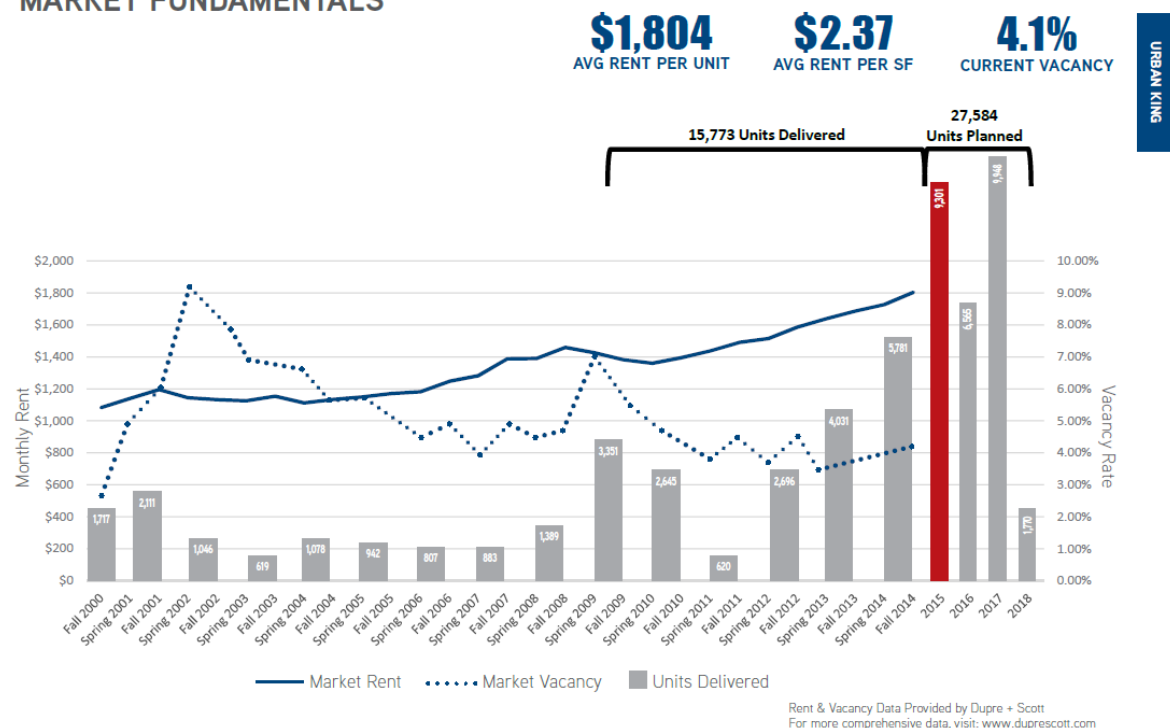
Sales Data: 50+ units

The same data for the “Urban King” submarket of Seattle, which includes Capitol Hill, is below:

	2009	2010	2011	2012	2013	2014
Number of Sales	3	9	8	19	17	29
Sales Volume	\$87.6M	\$232.6M	\$250.9M	\$749M	\$784M	\$1.1B
Average PPU	\$181,568	\$200,169	\$212,193	\$277,864	\$310,934	\$305,925
Average PPSF	\$213	\$280	\$326	\$381	\$437	\$428
Average Cap Rate	5.8%	5.2%	5.2%	4.8%	4.6%	4.5%
Number of Deliveries	3,351	2,645	620	2,696	4,031	5,781

Dupre & Scott has also provided data on market rents, vacancy rates, and apartment units delivered in the Urban King area dating back to 2000 and projected until 2018:

MARKET FUNDAMENTALS



Data on vacancy rates and net completions and absorptions is shown below:

Market Statistics for Seattle Apartments

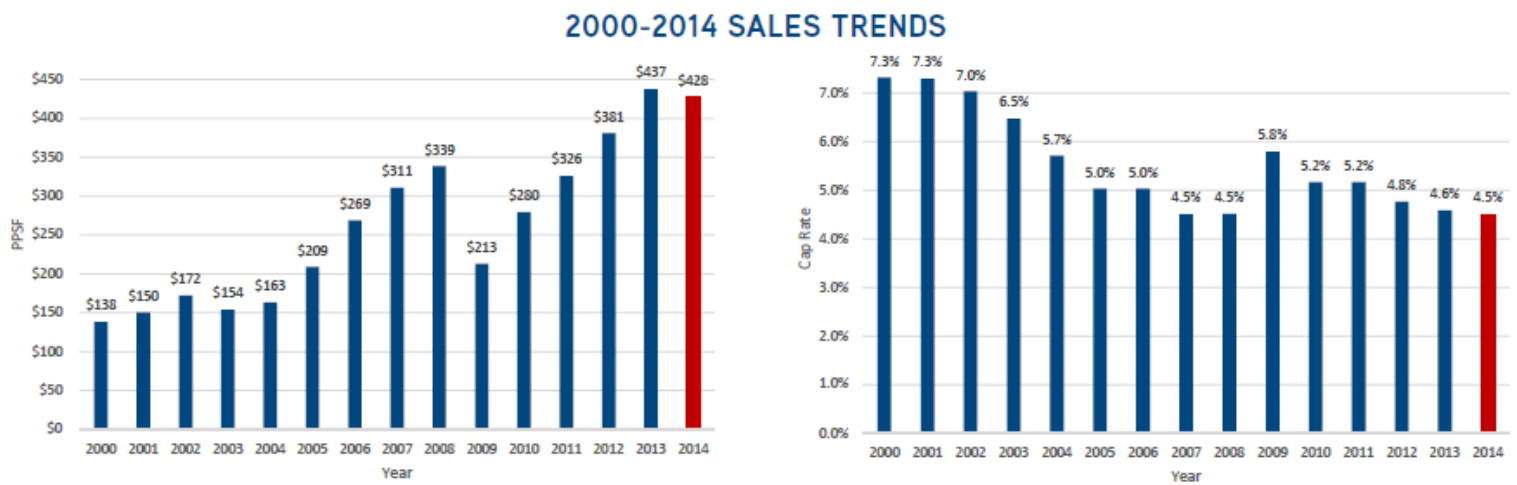
Rental Statistics:	Broader Market (Seattle Metro):	Submarket (Urban King County):	Neighborhood (Capitol Hill):
Avg. Rent per Unit (Q4 2014):	\$ 1,702	\$ 1,804	\$ 1,710
Avg. Rent per SF: (Q4 2014):	\$ 2.20	\$ 2.37	\$ 2.66

Vacancy Rates:	Broader Market (Seattle Metro):	Submarket (Urban King County):	Neighborhood (Capitol Hill):
2011 (Actual):	3.9%	4.5%	3.4%
2012 (Actual):	3.8%	4.6%	2.9%
2013 (Actual):	3.7%	3.9%	3.6%
2014 (Actual):	3.5%	4.1%	2.3%
2015 (Projected):	4.1%	4.2%	2.5%
2016 (Projected):	4.3%	4.4%	2.8%
2017 (Projected):	4.3%	4.6%	3.0%
2018 (Projected):	4.4%	4.8%	3.3%
2019 (Projected):	4.5%	5.0%	3.7%

Net Completions (Units):	Broader Market (Seattle Metro):	Submarket (Urban King County):	Neighborhood (Capitol Hill):
2011 (Actual):	1,318	620	N / A
2012 (Actual):	4,426	2,696	N / A
2013 (Actual):	5,986	4,031	N / A
2014 (Actual):	8,128	5,781	778
2015 (Projected):	14,554	9,516	1,326
2016 (Projected):	12,757	7,243	682
2017 (Projected):	12,871	10,334	738
2018 (Projected):	2,391	1,770	20
2019 (Projected):	14,148	9,932	288

Net Absorptions (Units):	Broader Market (Seattle Metro):	Submarket (Urban King County):	Neighborhood (Capitol Hill):
2011 (Actual):	3,100	763	N / A
2012 (Actual):	6,300	2,282	N / A
2013 (Actual):	9,000	4,499	N / A
2014 (Actual):	8,828	6,621	N / A
2015 (Projected):	12,105	8,837	N / A
2016 (Projected):	8,100	5,670	N / A
2017 (Projected):	7,900	5,372	N / A
2018 (Projected):	7,400	5,032	N / A
2019 (Projected):	7,350	4,778	N / A

Finally, apartment sale Cap Rates and \$ / SF sale values for the Urban King Area going back to 2000 are shown below:



DEMOGRAPHICS

As noted above, the Seattle metro area has been among the top 10 fastest growing regions in the US in recent years.

Additional data on population, employment, and the number of households in the broader region (King County and Snohomish County) is shown below:

Demographics for Broader Market (King and Snohomish Counties)

Year:	Population:		Employment:		Households:	
	Total Persons:	% Change:	Total Jobs:	% Change:	Households:	% Change:
2009 (Actual):	2,615,099	0.95%	1,399,900	(5.30%)	1,054,885	1.08%
2010 (Actual):	2,644,584	1.13%	1,376,850	(1.65%)	1,062,338	0.71%
2011 (Actual):	2,659,600	0.57%	1,405,475	2.08%	1,069,930	0.71%
2012 (Actual):	2,679,900	0.76%	1,443,992	2.74%	1,081,710	1.10%
2013 (Actual):	2,712,400	1.21%	1,486,236	2.93%	1,118,213	3.37%
2014 (Actual):	2,748,694	1.34%	1,528,952	2.87%	1,131,992	1.23%
2015 (Projected):	2,781,611	1.20%	1,563,068	2.23%	1,144,418	1.10%
2016 (Projected):	2,811,229	1.06%	1,593,462	1.94%	1,156,277	1.04%
2017 (Projected):	2,840,094	1.03%	1,618,632	1.58%	1,167,914	1.01%
2018 (Projected):	2,868,487	1.00%	1,642,399	1.47%	1,179,556	1.00%
2019 (Projected):	2,895,738	0.95%	1,665,721	1.42%	1,191,352	1.00%

REPLACEMENT COST ANALYSIS

Replacement Cost Analysis

Category / Line Item:		Units:	Rentable SF:	
The Lyric (215 10th Ave E) - Property Statistics:		234	186,215	
Expense Category:	Total in \$ as Stated:	% Total: Dev Costs:	\$ per Unit:	\$ per Rentable SF:
Land Acquisition Costs:				
Land Purchase:	\$ 20,000,000		\$ 85,470	\$ 107.40
Taxes & Fees:	1,500,000		6,410	8.06
Total Land Costs:	21,500,000	23.5%	91,880	115.46
Hard Costs:				
Excavation & Construction:	48,035,700		205,281	257.96
Contingency (3%):	1,441,071		6,158	7.74
General Contractor Fee (5%):	2,401,785		10,264	12.90
Total Hard Costs:	51,878,556	56.8%	221,703	278.59
Soft Costs:				
Architectural & Engineering:	2,295,150		9,808	12.33
Real Estate Taxes:	550,000		2,350	2.95
Office and Common Area FF&E:	712,000		3,043	3.82
Engineering:	695,123		2,971	3.73
Startup Expenses:	395,178		1,689	2.12
Legal & Closing:	385,415		1,647	2.07
Impact & Permit Fees:	3,289,012		14,056	17.66
Contingency:	1,300,000		5,556	6.98
Development Fee:	2,215,975		9,470	11.90
Total Soft Costs:	11,837,853	13.0%	50,589	63.57
Financing Costs⁽¹⁾:	6,178,895	6.8%	26,406	33.18
Total Development Costs:	91,395,304	100.0%	390,578	490.81
Development Profit (20%):	18,279,061		78,116	98.16
Total Replacement Cost:	\$ 109,674,365		\$ 468,694	\$ 588.97

(1) Construction financing assumes a 65% LTC with 70% of the loan outstanding for 24 months at a 6% interest rate.

APARTMENT COMPLEX PRO-FORMA ANALYSIS AND VALUATION

Based on the data above and the mix of units for The Lyric, please construct a Pro-Forma for the complex for the past year (2014) and project it over the next ten years.

The current owners have provided the following information on the property's financial performance over the past 12 months and its future expected performance:

Key Assumption:	Units:	Value:
Net Rentable Area:	Square Feet	186,215
Number of Units:	#	234
Average Rent:	\$ / Square Foot / Month	\$3.16
Other Income:	\$ / Unit / Month	\$150
Vacancy / Collection Loss (Applies to Rent and Other Income):	%	5.0%
Operating Expenses (Utilities, Repairs / Maintenance, Insurance, Payroll, etc.):	\$ / Unit / Year	\$3,300
Real Estate & Property Taxes:	\$ / Square Foot / Month	\$0.30
Replacement Reserve:	\$ / Unit / Year	\$1,500
Annual Income Growth Rate:	%	3.0%
Annual Expense Growth Rate:	%	3.0%

The items above should factor into the property's Net Operating Income (NOI).

Next, you will create projections for "below the NOI line" items, such as other Capital Expenditures (CapEx), Tenant Improvements (TIs), and Leasing Commissions (LCs).

You will subtract these items from NOI to calculate the property's Adjusted NOI. Please use the following assumptions in your Pro-Forma:

Key Assumption:	Units:	Value:
Capital Expenditures:	\$ / Unit / Year	\$2,000
Tenant Improvements (TIs):	\$ / Unit / Year	\$800
Leasing Commissions (LCs):	\$ / Unit / Year	\$600
Taxes:	%	Assume no taxes on capital gains or annual cash flow
CapEx Growth Rate:	%	2.0%
TI Growth Rate:	%	2.0%
LC Growth Rate:	%	2.0%

Make sure your financial model can support different scenarios.

For example, one scenario might correspond to the assumptions above; another scenario might correspond to a market decline and a recovery.

Determine which scenarios seem likely and how events such as a market decline or recovery would impact rental income growth, the vacancy rate, and the other assumptions in the tables above.

Transaction Assumptions:

Please use the following assumptions for the initial acquisition:

Key Assumption:	Units:	Value:
Purchase Price:	\$ as Stated	\$120 million
Purchase Date:	Date	2014-12-31
Purchase Fees:	%	1.0%

Loan-to-Value (LTV) Ratio:	%	70.0%
Loan Issuance Fees:	%	1.0%
Loan Interest Rate (Fixed):	%	4.0%
Loan Amortization Period:	# Years	30
Loan Maturity:	# Years	10
Prepayment Penalty (% of remaining principal):	%	3.0%

Please use the following assumptions for the resale of the property in the future:

Key Assumption:	Units:	Value:
Exit Date:	Date	2024-12-31
Exit Cap Rate:	%	Determine based on the market data and your model
Selling Costs:	%	2.0%

Calculate **BOTH** Unleveraged IRR (Project IRR) and Leveraged IRR (IRR to Equity Investors) over this 10-year period, making sure you factor in fees, prepayment penalties, and the required debt principal repayment when the property is sold. Your model should support any exit year between 2015 and 2024.

Once you've finished this initial analysis, please complete a DCF valuation of the property and value it using comparable apartment sales.

You can assume that Iron Bank Real Estate Investors is targeting a **10%** levered return on stabilized ("core") properties; pick a Terminal Cap Rate and Terminal Cash Flow Growth Rate in-line with the assumptions you used in the Pro-Forma Analysis.

You can also factor in the Replacement Cost Analysis shown above when valuing the Property.

EXCEL / CASE STUDY QUESTIONS

In addition to your 2-page proposal on whether or not to acquire the property for \$120 million, please answer the following case study questions:

- 1) Calculate the Net Operating Income and the annual unleveraged return for Year 1, using the “Base Case” numbers in the section above.
- 2) Assume that IBREI uses no debt for the initial purchase, and that it sells the building in December 2024 for a gross price of \$130 million. Also assume that there are no capital gains taxes or income taxes, and use Excel to calculate IBREI’s unleveraged IRR on this investment.
- 3) Use the scenario provided in question #2, but now assume that 70% leverage (along with the debt assumptions in the previous section) is used.
- 4) Calculate the present value of the 2019 annual operating cash flow at a 10% discount rate. Assume no debt is used to fund the acquisition.
- 5) When calculating the net present value of cash flows to equity, should the discount rate be higher, lower, or equal to the discount rate used for the same investment if no leverage were used? Justify your answer in 5 or fewer sentences.
- 6) Could the cap rate on an acquisition (based on Year 1 projected NOI) be higher than the projected IRR over a 5-year holding period (assuming a resale at the end of Year 5)? Explain your answer in 5 or fewer sentences.
- 7) Explain the relationship between projected IRR and NPV for an investment. Once again, justify your answer in 5 or fewer sentences.