

Tucson MSA
Class A Multifamily Market Study

Prepared for
Pima County Real Estate Research Council

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EXECUTIVE SUMMARY

Eastern Pima County is home to just over one million residents; roughly two-thirds of that population own single family homes and one-third rent either apartments or single family homes.

The rental and for-sale housing markets in the Eastern County show signs of recovery since the recession, though the market has not returned to pre-recession levels of housing production or occupancy.

Additional market and economic trend findings include:

- From 2000 to 2013, the market added 5,382 new households per year. During that same time period, 2,365 new jobs were added per year.
- Based on household growth and the number of renter HHs (34.5%) and the number of renter HHs renting multifamily (65%), overall multifamily demand averaged 1,207 per year.
- In 2014, Pima County added 4,245 new households, 1,443 new renter households, of which 938 are multifamily renter households. The market also added 4,900 new jobs.
- From 2011 to 2014, annual Class A demand from household growth was 105 units per year. The market absorbed a total of 1,917 new Class A units, an average of 480 units per year.
- 2015 – 2020: 5,457 new households annually; approx. 300 new Class A renter households
- 2015 – 2020 Class A MF demand is projected at 1,836 to 2,736 units from household growth and existing households. New Class A supply is 2,907.

INTRODUCTION

Study Purpose and Organization

The purpose of this report is to analyze multifamily market conditions within the Tucson MSA, evaluate its position with respect to current and anticipated market trends and conclude with an analysis of market opportunities for future multifamily apartment development. This analysis is not site specific, but rather, it is intended to explore five year demand and supply of new Class A market rate apartment construction within Pima County.

“A” Class properties typically have the following characteristics:

- Newer market rate properties built within the last 15 years
- High level of amenities,
- Highest income earning tenants
- Lowest vacancies
- Highest rents with no deferred maintenance
- Higher rent per square foot
- Well-located

Besides offering residents the newest housing in the rental market, Class A properties can also market a lifestyle, not just a place for renters to live. They are often in a great location or in a more expensive area of town, but can also be built in a class B neighborhood.

The report is divided into three sections as follows:

Part One is a historical analysis from 2000 to 2013

Part Two is a summary and analysis of the Multifamily market in 2014

Part Three is a forecast for the period of 2015 – 2020

PART ONE: Historical Economic Indicators 2000 – 2013

Primary demand for multi-family housing is a function of several factors including job growth, housing affordability and demographics, such as population growth, household formation and lifestage. These factors will be analyzed in this study as a means to understand future demand for multi-family housing in the Tucson market. Secondary demand drivers for multi-family units include desire for low maintenance lifestyle, temporary employment/school, shift in homeownership preference, location preferences, maturing of suburban submarkets, etc.

Population

In 2013, the population of the Tucson MSA was estimated to be 996,800. Due to a decrease in employment, since 2008, population growth slowed to an average of 0.3 percent annually compared with an average of 2.3 percent annually from 2000 through 2007. From 2000 to 2010, more than 60 percent of population growth was due to net in-migration, which averaged approximately 8,450 people a year, whereas net natural change (resident births minus resident deaths) averaged 5,200 people a year.

From 2000 to 2013, the Tucson MSA population grew by 148,425 people, an average of 11,417 people per year. During that same time period, Tucson has added 77,021 housing units. When using the statistical household formation rate, this same 148,425 population increase equates to a total of 60,582 new households, or 4,660 new households per year.

Household Formation

According to the Federal Reserve, “In the wake of the housing bust of 2006 and the subsequent recession, the rate of new household formation in the United States plunged, and it has remained startlingly low since. Between 2006 and 2011, roughly 550,000 new households formed per year, on net, compared with 1.35 million per year over the previous five years. Indeed, household formation over the last five years appears to have been far lower than in any other five-year period over the 40 years for which we have annual data.”

Nationally, that represents a decrease of 800,000 households per year over five years which equates to 4 million households not formed. The total number of US households is 126,545,600 and Pima County accounts for .03% of the US population at just over 400,000 households. By calculating that percentage to the Pima County population, the share of HHs not formed during the same period is roughly 12,000 total households, or 2,400 households per year.

In analyzing household growth in Tucson, it appears that decreased household formation contributed to the slow growth in households during the five year period from 2008 to 2012 where **the Tucson market dropped from adding an average 7,700 households a year to 1,071 households a year.**

Analyzing demand drivers for multi-family housing from a 13-year historical perspective, Chart 1 below highlights housing, population, household and employment change from 2000 to 2013.

Chart 1: Housing, Population, Household and Employment Growth

	Housing Change				Population, HH and Employment Change						
	SFR Permits	SFR Closings	MF New Permits	New Housing Supply	Total Employment	Annual Change	Percent Change	Total Population	Population Change	Total Household	HH Growth
2000	7,172	6,197	934	7,131	347,000	13,600	3.92%	848,375	4.46%	346,276	7,873
2001	6,867	5,857	1,553	7,410	344,600	-2,400	-0.70%	865,701	2.04%	353,347	7,072
2002	7,493	5,846	1,132	6,978	343,200	-1,400	-0.41%	881,530	1.83%	359,808	6,461
2003	8,511	5,994	260	6,254	345,600	2,400	0.69%	897,838	1.85%	366,464	6,656
2004	9,624	7,074	947	8,021	357,500	11,900	3.33%	914,011	1.80%	373,066	6,601
2005	11,762	8,634	865	9,499	367,000	9,500	2.59%	940,004	2.84%	383,675	10,609
2006	8,579	8,149	367	8,516	379,800	12,800	3.37%	959,474	2.07%	391,622	7,947
2007	5,095	6,185	619	6,804	385,400	5,600	1.45%	977,258	1.85%	398,881	7,259
2008	3,018	3,339	349	3,688	381,400	-4,000	-1.05%	984,032	0.69%	401,646	2,765
2009	2,077	2,249	0	2,249	361,800	-19,600	-5.42%	984,274	0.02%	401,744	99
2010	1,865	1,778	227	2,005	354,000	-7,800	-2.20%	981,168	-0.32%	400,477	-1,268
2011	1,438	1,281	1,532	2,813	355,500	1,500	0.42%	986,081	0.50%	402,482	2,005
2012	2,040	1,506	1,106	2,612	360,800	5,300	1.47%	990,380	0.44%	404,237	1,755
2013	2,250	1,897	1,509	3,406	366,500	5,700	1.56%	996,800	0.65%	406,857	2,620

Sources: Bright Future Sales & Permit Report, AZ Stats.gov, EBR; RECG

Note: MF permit number includes all MF permits, including 40+ units

The Tucson MSA has a historical household size of 2.45 people per home, and a rentership rate of 34.5%. According to a 2010 Pima County housing study, approximately two-thirds of renters reside in multi-family units vs. single family rentals. Chart 2 below assesses historical demand from 2000 to 2013 for multifamily units in the Tucson MSA using the aforementioned 34.5% rentership rate and 65% multifamily renter rate. With employment growth of 33,100 jobs and population growth of 184,614 residents, new household formation totals just over 75,000 households. With roughly one-third of new households renting and 65% of renter households renting multi-family units (per 2010 Pima County housing study), multi-family housing demand totals just under 17,000 units. Total units permitted during that same time period total 11,400, indicating a potential under supply of new multifamily units, assuming historical long run household formation rates and percentage of renters in multi-family units.

Chart 2: Historical Multifamily Housing Demand 2000 – 2013

	New Households	New Renter Households	MF Demand	MF Permits
2000	14,779	5,099	3,314	934
2001	7,072	2,440	1,586	1,553
2002	6,461	2,229	1,449	1,132
2003	6,656	2,296	1,493	260
2004	6,601	2,277	1,480	947
2005	10,609	3,660	2,379	865
2006	7,947	2,742	1,782	367
2007	7,259	2,504	1,628	619
2008	2,765	954	620	349
2009	99	34	22	0
2010	-1,268	-437	-284	227
2011	2,005	692	450	1,532
2012	1,755	605	393	1,106
2013	2,612	901	586	1,509
TOTAL	75,353	25,997	16,898	11,400
AVERAGE	5,382	1,857	1,207	814

Sources: population.az.gov; laborstats.az.gov; Bright Future; PAG; EBR; Pima Co.; RECG

Employment

Since 2000, Tucson has added 33,100 new jobs, an average of 2,364 jobs per year. This average includes the loss of 31,400 jobs from 2008 to 2010. From 2011 to 2013, Tucson has recorded an average increase of 4,167 jobs per year. Job growth is an important indicator for multifamily, as new residents have a high propensity for renting for the first year of residence.

Median household income has increased from \$32,544 in 1997 to \$45,202 in 2013. The median household income equates to a monthly housing payment of \$1,130 at 30% of gross.

Housing Affordability

Historically, housing affordability has been a significant demand driver for multifamily housing in Tucson. As housing prices increase, more residents look to renting as a more affordable housing option. Housing is defined as affordable if less than 30% of income is spent on housing (*or less than 45% for housing + transportation*). The FHA current debt to income ratio is 31% as of 2013.

Tucson Market Fundamentals – Supply

The Tucson market has 7,636 Class A units built from 1990 to 2013 within 40 properties, with an average vacancy of 7% (not including two properties delivered in 2013 still in lease up period) and an average rent per square foot of \$0.96.

New Construction

From 2011 to 2013, 1,801 new Class A units within 11 properties were delivered, 9 of which are stabilized. As of 4Q 2014, within the 9 stabilized properties, they have an average lease rate of \$1.09/SF and an average 7% vacancy rate.

Chart 3: New Multifamily Projects Delivered 2011 – 2013

New Class A Multifamily Projects			
Property Name	Submarket	Units	Completion
Encantada Riverside Crossing	NW	304	2011
Legacy at Dove Mountain	Marana	168	2011
Place at Creekside	East	208	2012
Avilla Marana One	Marana	166	2012
Place at Canyon Ridge	West	116	2012
Aerie at Tanque Verde	East	85	2012
Casa Presidio	Central	78	2012
Encantada at Dove Mountain	Marana	272	2013
Avilla Preserve on Orange Grove	NW	184	2013
Avilla River	NW	76	2013
The Herbert	Core	144	2013
Total Completed		1,801	

Source: RECG

PART TWO: State of the Market in 2014

Tucson Market Economic Indicators

In 2014, the Tucson market experienced positive growth in terms of population and jobs, and continued the momentum in the right direction for the multifamily housing market. Affordability of single family homes increased slightly resulting from a decrease in pricing and interest rates by year end.

Population Growth

Population increased by 1% adding 10,400 new residents, which resulted in a household growth of 4,245 new households. As 34.5% of Pima County households are renter households, the increase in population added 1,443 new renter households.

Employment Trends

The market added 4,900 new jobs—increasing from 361,500 in 2013 to 366,400 in 2014--approximately half the number typically added annually. This increase in jobs puts the market gain at 17,400 new jobs since the loss of 31,400 jobs during the recession. As of December 2014, the unemployment rate dropped to 5.9%.

TREO reported the following jobs by industry/sector due to either attraction of new companies or expansion of existing companies:

Chart 4: 2014 Jobs Added by Industry

2014 Successes by Industry			
Industry	Jobs	Attraction	Expansion
Aerospace & Defense	487	1	7
Bioscience/Healthcare	399	4	0
Transportation & Logistics	30	1	0
Renewable Energy	55	1	1
Manufacturing	5	0	1
Call Center	2,103	2	4
Total	3,079	9	13

Chart 5: 2014 Jobs Added by Company

2014 Jobs Created by Company		
Company	Industry	# Jobs
Shared Services Center	Office Support	220
Department of Transportation	Streetcar	500
Hydronalix	Maritime Robotics	12
Hanergy Holding	Alternative Energy	183
Universal Bio Mining	Mining	40
Mister Car Wash	Car Wash	50
Ascent Aviation	Aviation	100
Modular Mining	Mining	50
Securaplane	Avionic products	55
Duralar Technologies	Nanotechnology	40
Zucarmex	Food Supplier	30
Quick Tek Assembly	Manufacturer	50
Composite Mirror Applications	Optics	5
Kirin Manufacturing	Manufacturer	5
Zygo Optical System	Optics	30
VXI Global Solutions	Call Center	500
CAID Industries	Manufacturing	114
Freshlight USA	Manufacturing	25
AFNI	Call Center	450
Total		2,459

Household Income

In 2014, the Pima County median household income was \$45,825; the average household income was \$61,754. Of the renter occupied households, charted below, 25% (36,431) of the households earn more than \$50,000, which correlates with Class A rents.

Chart 6: Renter Occupied Housing Units by Income



Source: ESRI, 2014; RECG, 2014

Housing Affordability

Homes became slightly more affordable due to a slight decrease in pricing and interest rates. Both resale and new home median pricing dropped year over year, 3.5% for resale, 1.25% for new, indicating that Tucson became slightly more affordable to purchase a home in 2014 vs. 2013. In December, the median price for a new home was \$247,283 vs. \$165,000, the median price for a resale home. This is a difference of \$82,283, or just under 50%. That pricing differential has been consistent since 2010. Interest rates dropped from 4.46% in December 2013, to 3.86% in December 2014, making housing slightly more affordable, especially for price and payment sensitive first time homebuyers.

Chart 7: Home Pricing Trends



Source: Bright Future; TARMLS; RECG

Demographic Trends

In 2013 and 2014, the Tucson market saw the emergence of a new group of renter, the “renter by choice”, renters who can afford to buy a home, but choose to rent due to lifestyle factors such as convenience, flexibility and access to resort-style amenities. These lifestyle renters are driving increased demand for Class A apartments.

While young adults traditionally have fueled the demand for rental housing, demographic trends indicate that the preference for renting crosses over multiple generations, from baby boomers and downsizing empty-nesters to “Generation Z,” the youngest group of renters entering the marketplace.

Chart 8: Pima County Population by Age in 2014

Pima County Population by Age				
	Census 2010		2014	
	Number	Percent	Number	Percent
0-19	257,767	26.3%	250,431	25.1%
20 - 24	75,340	7.7%	79,006	7.9%
25 - 34	126,173	12.9%	133,874	13.4%
35 - 44	115,795	11.8%	115,126	11.5%
45 - 54	131,528	13.4%	122,494	12.2%
55 - 64	122,367	12.5%	128,969	12.9%
65+	151,293	15.4%	170,863	17.1%

Source: ESRI

Multifamily Housing Demand

Total Class A demand from 2010 to 2014 was 524 units, based on 25% of multifamily renter households income qualifying for Class A rents, of which 2014 Class A demand was 238 units. It should be noted that the secondary demand drivers are not contributing to the formula derived demand measure from 2010 to 2014 of 524 units, which is based only off the primary demand driver of population increase.

Chart 9: Housing Demand

Housing Demand 2010 - 2014						
Tucson MSA						
	Employment Increase	Population Increase	New Households	New Renter Households	MF Demand	Class A MF Demand
2010	-7,800	-3,106	-1,268	-437	-284	-71
2011	1,500	4,913	2,005	692	450	112
2012	5,300	4,299	1,755	605	393	98
2013	5,700	6,400	2,612	901	586	146
2014	4,900	10,400	4,245	1,464	952	238
TOTAL	9,600	22,906	9,349	3,226	2,097	524
AVERAGE	1,920	4,581	1,870	645	419	105

Sources: population.az.gov; laborstats.az.gov; Bright Future; PAG; EBR; Pima Co.; RECG

Tucson Market Fundamentals – Supply

The Tucson market has 8,442 Class A units built from 1990 to 2014 within 44 properties, with an average vacancy of 7% (not including properties delivered in 2013 still in lease up period) and an average rent per square foot of \$0.96.

Aging Rental Inventory

Aging rental inventory got older. Eighty seven percent of Tucson’s multifamily inventory was built prior to 2000, with 76% of multifamily built prior to 1990. This is a potential secondary demand contributing factor. Many existing renters in older rental stock appear to have upgraded into new Class A product and aging Class A product is being reclassified to Class B.

Chart 10: Age of Apartment Inventory

Number of Units Constructed by Year (40+ Projects)		
Year Built	Total	Percent
<1982	26,489	39%
1983-1990	25,134	37%
1991-2000	7,510	11%
2001-2013	7,337	11%
2014	1,210	2%
Total	67,680	100%

Note: Includes all MF (student housing, affordable, etc.)

Class A Properties

Using the previously defined classification, RECG identified 44 Class A properties, 40 units or more, built from 1990, with 29 built since 2000, 15 of which have been built since 2011. With the recent construction of new Class A properties since 2011, totaling 2,609 units, the market is undergoing a re-classification of Class A properties.

Chart 11: Class A Properties

Community Name	Zip Code	Year Built	No. of Units	Community Name	Zip Code	Year Built	No. of Units
Encantada Riverside Crossing	85658	2011	304	Stargate West	85741	1996	136
Encantada Dove Mountain	85658	2013	272	Dorinda Vista II	85741	1998	113
La Entrada	85701	1991	186	Retreat at Speedway	85741	2002	304
The Herbert	85701	2013	144	Avilla Preserve	85741	2013	184
Place at Edgewood	85704	2000	252	Crescent Ridge	85742	2002	192
Legacy at DM	85704	2011	168	Crescent Ridge II	85742	2008	80
Avilla River	85704	2013	76	Summit Vista	85742	2008	288
Villas at San Dorado	85704	2014	274	Cortaro Farms Casitas	85742	2008	135
La Mariposa Casitas	85710	2002	142	Springs at Continental Ranch	85743	1999	196
Legends at La Paloma	85711	1995	312	Springs at Silverbell	85743	2002	290
Tierra Vida	85712	2000	200	Bear Canyon	85745	1996	238
Finisterra	85715	2005	300	Ledges at West Campus	85745	1997	205
Place at Canyon Ridge	85715	2012	116	Summerlin Vistas	85748	2000	356
Avilla Marana One	85716	2012	166	Tucson National Casitas	85748	2002	119
Sabino Canyon Casitas	85718	1995	44	Tanque Verde Valley	85748	2010	96
Casas Presidio	85719	2012	78	Avilla TV	85748	2012	85
CentrePoint	85737	1995	320	Place at Creekside II	85748	2014	144
Pusch Ridge	85737	1998	144	Condo at the Wm. Centre	85749	1995	255
Tanque Verde Casitas	85737	1999	105	Dorinda Vista I	85749	1996	138
Oro Vista	85737	2006	138	Golf Villas	85749	1999	231
Galeria del Rio	85737	2014	101	Encantada Steam Pump	85755	2014	288
Place at Rock Ridge	85741	1995	319	Place at Creekside I	86741	2012	208

New Construction

The Tucson market saw 807 units of new Class A multifamily apartments delivered in 2014, of which 285 units were absorbed. Another 342 units were absorbed in 2014 from properties delivered in 2013, bringing the combined total to 627 new Class A units absorbed in 2014.

Chart 12: New Multifamily Projects Delivered in 2014

New Class A Multifamily Projects			
Property Name	Submarket	Units	Completion
Encantada Steam Pump	Oro Valley	288	2014
Villas at San Dorado	Oro Valley	274	2014
Galeria del Rio	NW	101	2014
Place at Creekside Phase II	East	144	2014
Total Completed		807	

Source: RECG

Chart 13: Project Cycle Plan for 2014

Project Cycle Plan																			
Community Name	Developer	Submarket	Units Planned	Open date	Units Left	Mily Pace	2014				2015				2016				Units Left
							A	A	A	A	P	P	P	P	P	P	P	P	
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Current Leasing Efforts																			
Avilla Preserve	Aerie Dev.	NW	104	Jun-13	51	6.0	24	24	24	24	24	24	3						0
Avilla River	Aerie Dev.	NW	76	Apr-13	0	6	10	12											0
Encantada Dove Mountain	HSL	Marana	272	Aug-13	170	6.5	24	24	24	24	24	24	24	24	24	24	24	3	0
Herbert	Paachi	Core	144	2013	0	24	72	40											0
Place at Creekside II	MC Companies	East	144	Jan-14	100	4.0	8	12	12	12	16	16	16	16	16	16	4		0
Encantada Steam Pump	HSL	Oro Valley	288	May-14	220	15.0			30	30	30	30	30	30	26	26	26	26	0
Villas at San Dorado	Mark Taylor	Oro Valley	274	Aug-14	162	22.0			49	63	66	66	30	0					0
Galeria del Rio	Miramonte	NW	101	Feb-14	40	5.0	8	16	17	19	16	15	10						0
Current Leasing Efforts Subtotal			1,483		743	92.5	155	138	156	180	175	175	113	70	65	65	63	27	0

Demand Assessment

As indicated above in Chart 9, Class A demand from 2011 to 2014, based on household growth and household income, totaled 524 units. During that same time period, the market absorbed 1,917 new Class A units, indicating additional demand from existing renter households of 1,323 units. The four year total absorption of 1,917 new Class A units absorbed is three times the 524 new Class A units projected amount based on household growth alone, indicating a significant amount of demand coming from existing households.

PART THREE: Five Year Outlook – 2015 to 2020

Tucson Market Economic Indicators

Over the next five years, the Tucson market is projected to have continued improvement in population growth, job growth and income growth. As a well-located, affordable region with a unique natural environment and excellent weather for year round activities, Tucson will continue to attract retirees and families.

As with the rest of the US, Tucson will experience an increase in demand for multi-family due to the demographic shifts caused by the Millennial and Baby Boomer generations, which are twice the size of the generations before and after them.

One of the region's major employers, The University of Arizona, is projected to grow from a Fall 2014 total enrollment of 41,800 to 55,000 by 2020. This growth will drive the hiring of additional faculty and administrative staff. This growth would also impact the need for additional renting housing.

Population Growth

The Tucson MSA is projected to add 80,220 new residents from 2015 to 2020, an average of 13,370 per year. This equates to 5,457 new households per year at an average household size of 2.45 people per household.

As one third (34% to 35%) of Tucson households are traditionally renters, the household growth by applying the 34% to 35% ratio indicates an increase of 1,855 new renter households per year.

Chart 14: Population Growth 2015 – 2020

5 Year Population Growth						
	2015	2016	2017	2018	2019	2020
Population, July 1st estimates	1,018,100	1,029,200	1,042,900	1,057,600	1,072,406	1,087,420
% Change for Year Ago	1.10%	1.10%	1.30%	1.40%	1.40%	1.40%
Population growth	10,900	11,100	13,700	14,700	14,806	15,014
Household growth @ 2.45 per HH	4,449	4,531	5,592	6,000	6,043	6,128
Renter Household Growth (@34.5%)	1,535	1,563	1,929	2,070	2,085	2,114

Source: EBR Economic Forecast

Household Formation

The weak economy has created a “pent-up” demand for housing, especially among young people, who are an important demographic for multifamily housing. Unable to find adequate employment, many have decided to remain in their parents’ homes or live with roommates. If the labor market continues to recover, we expect them to revert to their pre-recession behavior, meaning that much of the household formation that would have happened over the last three to four years in a “normal” economy will now happen over the next few years. Based on an analysis of US household formation rates, which dropped during the recession, Pima County saw potentially up to 12,000 households not formed between 2006 and 2011. In analyzing household growth in Tucson, it appears that decreased household formation contributed to the slow growth in households during the five year period from 2008 to 2012 where **the Tucson market dropped from adding an average 7,700 households a year to 1,071 households a year**. It is anticipated that going forward demand for multifamily will increase due to increased formation of households.

Employment

Pima County is projected to add an estimated 38,223 new jobs by 2020, an average of 6,370 new jobs per year. Job growth is an important indicator for multifamily, as new residents have a high propensity for renting for the first year of residence in a new city.

Chart 15: Job Growth 2015 – 2020

5 Year Job Growth						
	2015	2016	2017	2018	2019	2020
Nonfarm Employment	367,400	372,700	379,600	386,700	394,434	402,323
% Change for Year Ago	1.10%	1.30%	1.90%	2.10%	2.00%	2.00%
New Jobs Per Year	3,300	5,300	6,900	7,100	7,734	7,889

Source: EBR

TREO projects 6,457 jobs to be added in 2015 either through attraction of new companies or expansion of existing companies. To date, the following job announcements have been made, which account for 1,700 new jobs in 2015.

Chart 16: Job Projections by Industry - 2015

2015 Projections by Industry		
Industry	Jobs	A/E
Aerospace & Defense	1,063	7
Bioscience/Healthcare	350	4
Transportation & Logistics	1,170	3
Renewable Energy	549	5
Manufacturing	1,650	9
Call Center	1,500	4
Other	175	4
Total	6,457	36

Chart 17: Job Announcements by Company - 2015

2015 New Job Announcements by Company		
Company	Industry	# Jobs
LCMS Laboratories, Inc.	Healthcare	31
Santé of Tucson	Rehabilitation	150
HomeGoods	Distribution	900
Ascent Aviation	Aviation	250
APAC Customer Service	Customer Service	300
AZ Optical Systems	Optics	40
Northwest Medical Center	Emergency Center	30
Total		1,701

Household Income

By 2019, Pima County median household income is projected to increase to \$53,258 (a 16% gain over 2014's median of \$45,825) and average household income is projected to increase to \$70,241 (a 14% gain over 2014). As the overall household income increases, it is anticipated that the number of Class A renter households will increase also.

Housing Affordability

House pricing is projected to increase over the next five years with experts forecasting national home appreciation rates at 3% per year through 2018. Experts also predict that the 30 year mortgage interest rate will increase over the next five years. In January, 2015, 30 year mortgage interest rate was 3.67%. As home prices continue to rise, more people will be priced out of the housing market and will continue renting.

Demographic Trends

In addition to job growth and population growth, demographic shifts will continue to play a significant role in increased demand for multi-family housing over the next five years, largely due to the size of the Baby Boomer and Millennial generations and a shift in housing preferences. Other groups that will impact demand for multi-family housing include single women and immigrants.

Demographic trends include the change in households, (increase in HHs without children and single HHs,) retiring baby boomers and growing gen Y population. This, combined with the recent economic downturn, contributed to a significant shift in attitudes towards homeownership. Single females are delaying marriage and having children.

The marriage rate in the U.S. has declined steadily for decades and shows no signs of abating. As a result, the number of single and unmarried households has risen and will likely continue to rise at a rate faster than the growth in population. This trend favors multifamily housing because unmarried households have consistently shown a higher propensity than married households to live in multifamily housing.

As the chart below illustrates, the baby boomer and millennial generations are twice as large as the generations before them. The implications of this demographic trend has been discussed extensively and will be highlighted here.

Chart 18: US Population by Generation

US Population by Generation			
Traditionalists	Born 1925-1945	Age 70 - 90	44 million
Baby Boomers	Born 1946-1964	Age 51 - 69	80 million
Generation X	Born 1965-1980	Age 35 - 50	46 million
Generation Y/Millennials	Born 1981-2006	Age 9 - 34	92 million

As Baby Boomers approach retirement, and currently there are over 40 million retired, they look to downsize their homes, often moving from a large single family home in the suburbs where they raised their children, to a smaller home with less maintenance closer to amenities such as medical facilities, arts and culture activities, etc. This shift in housing preferences is already driving the development of upscale urban multifamily projects across the US. As Chart 6 below reflects, 30% (299,832) of Tucson’s population is over 55 years old and over the next five years will increase to 32%, or 327,993 people.

Chart 19: Pima County Population by Age

	Pima County Population by Age					
	Census 2010		2014		2019	
	Number	Percent	Number	Percent	Number	Percent
0-19	257,767	26.3%	250,431	25.1%	252,114	24.5%
20 - 24	75,340	7.7%	79,006	7.9%	71,444	7.0%
25 - 34	126,173	12.9%	133,874	13.4%	142,747	13.9%
35 - 44	115,795	11.8%	115,126	11.5%	117,863	11.5%
45 - 54	131,528	13.4%	122,494	12.2%	113,825	11.1%
55 - 64	122,367	12.5%	128,969	12.9%	131,535	12.8%
65+	151,293	15.4%	170,863	17.1%	196,458	19.1%

Source: ESRI

Generation Y, also known as the Millennials, have a very different set of housing preferences which have been impacted by technology and the recent Recession. Unlike previous generations, who sought out the stability of homeownership, Gen Y’s seek out more flexible housing options which can be easily accommodated by renting. As Chart 6 above reflects, 13.4% of Tucson’s population is age 25-34 years old and over the next five years will increase to 13.9%.

Buck Horne, a housing analyst at Raymond James, claims the shift in female education, marriage and fertility rates will drive rental apartment demand going forward. He points to a growing educational imbalance, that is, 3.1 million more women enrolled in college than men and 4 million more college-educated women in the workforce than men. "That creates a structural imbalance in the number of suitable partners. Women leave college with good income prospects and are not finding suitable husbands and fathers," says Horne. Consequently, the millennial generation is delaying marriage and motherhood, and birth and fertility rates are dropping. The female fertility rate is at its lowest level in recorded U.S. history, according to the Centers for Disease Control/Raymond James research. 41 percent of children are born out of marriage. Horne's research finds single mothers prefer living closer in to cities and staying in full amenity apartment rentals. This all points to more structural, long-term demand for rental housing.

RCLCO in a 2013 report conclude that even without assuming a major change in preference for multifamily housing, two key demographic trends, described below, should drive demand for multifamily housing above what might be expected from population growth alone.

The weak economy has created a situation of "pent-up" demand for housing, especially among young people, who are the most important demographic for multifamily housing. Unable to find adequate employment, many have decided to remain in their parents' homes or live with roommates. If the labor market continues to recover, we expect them to revert to their pre-recession behavior, meaning that many of the household formations that would have happened over the last three to four years in a "normal" economy will now happen over the next few years.

The marriage rate in the U.S. has declined steadily for decades and shows no signs of abating. As a result, the number of single and unmarried households has risen and will likely continue to rise at a rate faster than the growth in population. This trend favors multifamily housing because unmarried households have consistently shown a higher propensity than married households to live in multifamily housing.

Multifamily Housing Demand

An analysis of population and household growth projections indicates that there is a projected 5 year demand for 7,343 additional multifamily units, based on 65% of new renter household growth of 11,296. Of that demand, approximately 25% (based on renter households earning \$50,000 or more per year) can afford Class A multifamily housing, equating to demand for 1,836 new Class A units. This projection is based on population and household growth only and does not take into account demand from existing households (rollover of existing residents moving in and out of apartments and single family homes). Over the past four years, that demand has accounted for an additional absorption of 1,324 Class A units, on average 331 units per year. Therefore, potential additional demand between 75 to 100 units per year (accounting for a decrease in pent up demand over time) is estimated to be absorbed by existing households, based on recent absorption data.

Chart 20: Tucson Multifamily Housing Demand 2015 – 2020

Housing Demand 2015 - 2020 Tucson MSA						
	Employment Increase	Population Increase	New Households	New Renter Households	Total MF Demand	Class A MF Demand (HH growth only)
2015	3,300	10,900	4,449	1,535	998	249
2016	5,300	11,100	4,531	1,563	1,016	254
2017	6,900	13,700	5,592	1,929	1,254	313
2018	7,100	14,700	6,000	2,070	1,346	336
2019	7,734	14,806	6,043	2,085	1,355	339
2020	7,889	15,014	6,128	2,114	1,374	344
TOTAL	38,223	80,220	32,743	11,296	7,343	1,836
TOTAL MF UNITS UNDER CONSTRUCTION OR PLANNED						2,164
TOTAL UNABSORBED CLASS A UNITS CARRIED OVER FROM 2014						743
TOTAL MF UNITS IN MARKET 2015 - 2020						2,907

Sources: population.az.gov; laborstats.az.gov; Bright Future; PAG; EBR; Pima Co.; RECG

Multifamily Housing Fundamentals

New Construction

There are a total of 2,164 new Class A units in the pipeline, either under construction or planned, to be delivered over the next five years. There are 897 new Class A apartment units coming on line in 2015—an additional 228 units in Oro Valley (where there are approximately 400 units left to be leased up at new communities), 183 units at Avilla Sabino in the Catalina Foothills submarket, another 118 units at Avilla Marana and 368 units at Encantada at Tucson National. In first quarter 2016, there are 206 units scheduled to be completed.

Additional unabsorbed supply delivered in 2013 and 2014 is 743 units, for a total of 2,907 new Class A units in the market over the next five years.

Chart 21: New Multifamily Projects Planned for Delivery 2015 – 2019

New Class A Multifamily Projects			
Property Name	Submarket	Units	Completion
Avilla Sabino West	Cat Foothills	53	2015
Avilla Sabino East	Cat Foothills	130	2015
The Canyons at Linda Vista	Oro Valley	228	2015
Avilla Marana Two	Marana	118	2015
Encantada at Tucson National	NW	368	2015
Place Presidio Trails	Southeast	206	2016
Downtown Abbey	Core	46	2017
Monier	Core	122	2017
Dove Mountain Casitas	Dove Mtn	283	2017
Avilla Three	Marana	180	2017
Encantada at Continental Ranch	Con Ranch	300	2018
Avilla Four	Marana	130	2019
Total Planned		2164	

Developers and property managers report that the majority of renters move from within a five mile radius of the new property. They also report that Class A renters are predominantly non-family households (65% to 75%).

Below is the forecasted absorption by quarter of the existing and planned Class A units from 2015 to 2020.

Conclusion

A market wide analysis of demand and supply to 2020 indicates that the Tucson market is projected to have a demand of 1,836 new Class A units, based on forecasted household growth and job growth and an estimated 450 to 600 additional units, based on existing households. During that same time period, there will be a total of 2,907 new Class A units delivered. As a result, it is concluded that the Tucson market Class A multifamily sector overall is slightly oversupplied in terms of projected five year job and household growth, existing renter household demand and new Class A supply coming on line.

Based on the market wide analysis, two further conclusions are drawn. First, given that that there have been 1,833 new Class A units delivered through 2014 in the greater northwest area, and another 1,241 new units coming on line in the next five years in the same geographic segment of the market, it is assessed that this area of the market is potentially oversupplied with new Class A product.

Second, the absorptions and higher lease rates of new Class A product within close proximity of the city's core indicate a potential undersupply for new Class A units, that would serve pre-family young singles and couples and post-family empty nesters and retirees who want to live within close proximity to employment and lifestyle amenities.