

# Notes on development projects in seniors housing & care

## Do penetration rates matter?

*“This market has unmet need for 75-to-125 assisted living units.”*

Excerpt from a recent development feasibility study

The conclusion that a market has “unmet need” is a key statistic in many senior housing development feasibility studies. It is also highly unreliable.

An “unmet need” calculation assumes some natural market penetration rate: a market has X many seniors and Y many assisted living (AL) units; at say a 4% penetration rate, the market has unmet demand for Z more AL units. Simple.

And wrong. Across the top 100 metro areas (MSAs), the penetration rate of households aged 75+ by market-rate AL units is 4.3%. By the reasoning of “unmet need,” local markets with a less-than-expected penetration rate has untapped demand.

However, what penetration rate should be expected for a market? If some natural penetration rate across markets existed, then markets with high penetration would have low occupancy and vice-versa. Scattering them on the chart at right, where each dot is a metro market, dots should cluster roughly in a line from top-left to bottom right.

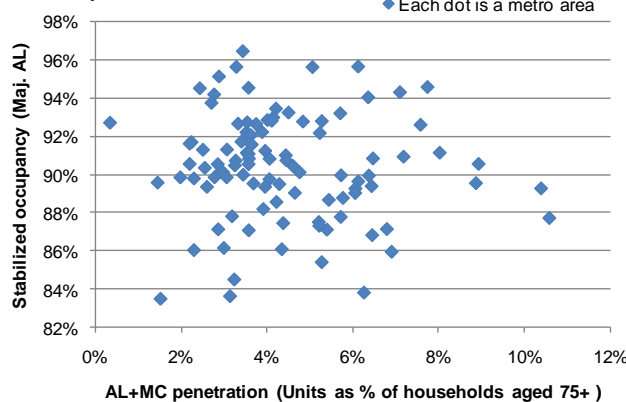
In reality, however, no correlation exists between occupancy and penetration: dots scatter widely on the chart. So does penetration rate not matter?

A closer look reveals some useful patterns, however. The poster child for high-penetration high-occupancy markets is Lancaster, PA. Its independent living (IL) penetration rate is an astonishing 25%, twice the next

highest MSA. By most methods estimating unmet need, it would be far oversaturated. Yet occupancy among Majority IL communities is 93%, over 300 bps higher than the national average. Why?

The reasons are historical. Generations of Lancaster widows moved into local continuing care retirement communities (CCRCs) often run by Quakers. People

### Occupancy doesn't correlate with penetration rate



AL= Assisted Living; MC= Memory Care  
Source for all data on this page: NICMAP 2Q11

watched their parents and aunts move into CCRCs. Then, when they got to that age, they expected to do the same. The market became educated in the product. By contrast, Las Vegas (a low-penetration, low-occupancy market) has no such tradition.

To explore this theory, markets can be segmented by how much history they have with seniors housing. Markets with high penetration plus supply that is *older-than-average* have roughly the same occupancy as low-penetration markets. However, high-penetration markets with *younger-than-average* supply have occupancy roughly 150 bps lower than

#### ISSUE IN BRIEF:

- Do penetration rates matter? 1
- Case study: Dallas TX 2-3
- What's new in development 4



the rest (see table below).

This relationship is corroborated by other data. In a recent SHA newsletter (2011 Issue 2), the relationship between new IL supply and growth in demand absorption was highlighted: additional supply over time stimulated new demand.

SHA believes the effect of penetration is perhaps stronger on room rates rather than on occupancy. At one multi-property chain, SHA's principals have statistically correlated higher penetration with lower room rates. Several reasons may explain this

correlation: (a) rates may be lowered to stimulate demand; (b) greater competition can lead to price wars.

Numerous ill effects can come from overweighting penetration rate in

*Continued on page 4*

#### High penetration rate = lower occupancy in younger markets

		MSA occupancy	
		Lower	Higher
Avg. Age	Older	90.5%	90.8%
	Newer	91.0%	89.2%
of AL+MC units in the MSA		Penetration	

## Case study: Acquisition of Acme Assisted Living

Note: the parties in this transaction have not helped prepare this case study and are not clients of SHA.

### Acme Assisted Living Suburban Dallas, TX

Earlier this year, a portfolio sale was announced that includes an assisted living community in suburban Dallas, TX

This case study will evaluate a key question in underwriting any acquisition is: does this asset have revenue upside?

Because the transaction has not closed, this case study will lightly disguise the community. It will be called "Acme Assisted Living," which would be an excellent name if Warner Brothers ran senior housing.

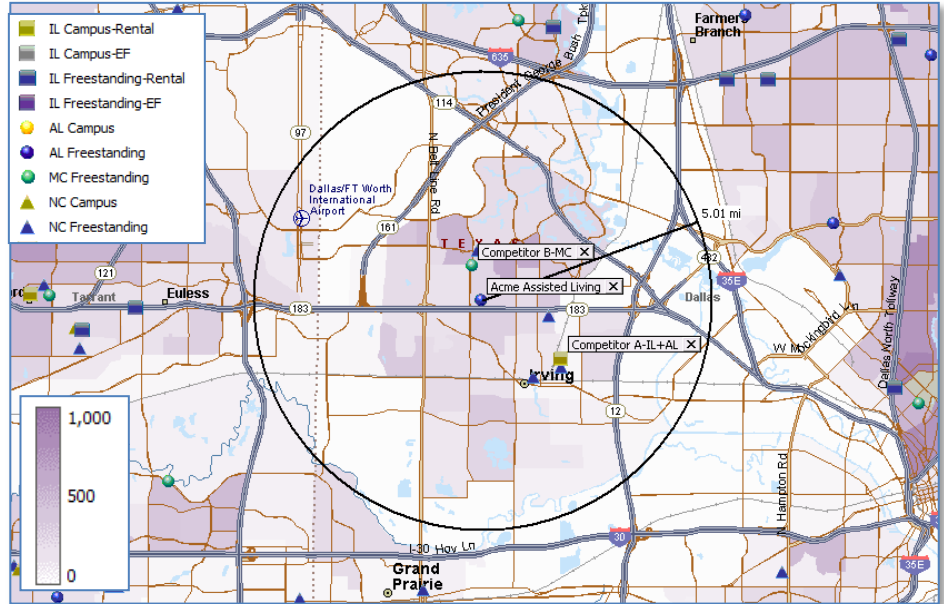
#### Overall Dallas market

The Dallas economy has done relatively well in the past several years. Since the peak, employment and housing values dropped less than half as much as the US average has.

(Source: Brookings Institution, 1Q11)

In assisted living (AL) & memory care (MC), Dallas historically has been a low-occupancy low-rate market. Current occupancy of Majority AL communities is 85.4%, 410 bps

### Income-qualified Children-of-Seniors Households 45-64, income \$75k+ per sq. mi



below the average for the largest 31 MSAs, according to NICMAP. Average monthly rent is \$3165, nearly \$400 below the large-market average.

Sources: NICMAP 2Q11; AGS 2009

#### Supply & demand: rankings vs. peers

row	(5-mile ring surrounding site)	Acme Assisted Living		
		Decile vs ... (higher = better)		
		2009	...Majority AL in Top31 mks	...Dallas MSA Majority AL
1	COMMUNITIES IN DECILE SET		2,297	110
2	<b>DEMAND</b>			
3	POPULATION	189,552	5th	5th
4	Age 45-64	43,256	4th	4th
5	Age 75+	5,722	3rd	5th
6	HOUSEHOLDS	71,645	5th	5th
9	Age 45-64, income \$75k+ (QCG\$75k)	7,895	3rd	3rd
10	Age 45-64, income \$100k+	4,616	3rd	3rd
11	Age 75+, income \$35k+ (QS\$35k)	1,575	3rd	5th
13	Hispanic households	22,122		
14	% Hispanic	31%		
19	MEDIAN HOUSEHOLD INCOME	47,929	2nd	3rd
20	Age 45-64	57,000	2nd	2nd
21	Age 75+	36,400	4th	3rd
22	MEDIAN HOME VALUE (4Q09)	197,775	4th	7th
23	<b>GROWTH RATES (Annual)</b>			
25	Age 45-64	3.6%	10th	7th
26	Age 75+	3.5%	9th	4th
27				
28	<b>SUPPLY</b>			
30	Total AL units	173	8th	8th
31	Total MC units	48	7th	7th
33	<b>SUPPLY PENETRATION</b>			
36	AL as % of QCG\$75k	2.2%	7th	6th
37	AL as % of QS\$35k	11.0%	6th	8th
38	MC as % of QCG\$75k	0.6%	5th	7th
39	MC as % of QS\$35k	3.0%	4th	7th

Sources: NICMAP 2Q11; AGS 2009; SHA decile analysis

#### Local market & site

Acme's core market is bounded by several highways giving its natural market a radius of roughly five miles around the site. It has good arterial access. It is a mile west of a large mall, a regional magnet, and a prominent hospital, so arguably can draw from a wider area.

However, the site's micro-climate is down-market. It is located behind a struggling strip mall with a thrift store and vacancies. It fronts to a road with car dealerships and flex-industrial buildings.

The building is a typical Acme design for Texas: one-story; square with a large courtyard; brick with colonnades on the front.

#### Demand

The market is neither deep nor affluent. In the surrounding five miles, it has 1,575 income-qualified senior households (households aged 75+ with income \$35,000+, or "QS35", on row 11 of the table at left).

So is that good or bad? When compared to the 2,297 Majority AL communities in top U.S. metro markets, only between 20-30% of them have thinner QS35 density than does Acme (3rd decile). Among Dallas peers, however, it's about average (5th decile).

Children of seniors are important influences in the purchasing decision for AL & MC. The site's 7,895 income-qualified caregivers (QCG75, row 9) are in the thin 3rd deciles both for Dallas and top U.S. metro markets.

Unless the community effectively markets to Hispanics, effective demand density is likely trimmed further by the sizeable Hispanic population (line 14).

On the other hand, estimated annual population growth is a strong 3.5%.

Affluence-wise, incomes and home values, rows 19-22, are relatively weak

### Competitors within five miles: AL+MC supply only

Property Name	Distance to target	Year Opened	Total IL units	Total AL units	Total MC units	Total NC beds
Acme Assisted Living	-	1999	0	113	0	0
Competitor B-MC	0.8	2004	0	0	48	0
Competitor A-IL+AL	2.2	1984	141	60	0	0

No new supply is known to be under construction. Source: NICMAP 2Q11

2<sup>nd</sup>-to-4<sup>th</sup> deciles (except vs. Dallas home values: Acme's surrounding home values are boosted by a tract of \$600,000 golf-course homes north-east of the site.)

#### Supply

The supply situation is somewhat more promising. The local market has only two relevant competitors, one each in AL and MC.

Competitor A is an older IL/AL in separate buildings, with the AL perhaps built more recently than 1984. With its ratio of IL-to-AL, Competitor A needs to fill roughly two-thirds of the AL units from the market beyond its IL residents.

Competitor B operates 14 mostly small MC-only communities in the Dallas/Ft. Worth area. This one was built in 2004.

Bearing in mind the limited usefulness of penetration rate in assessing supply-demand issues (see cover story of this newsletter), supply penetration rates are generally favorable for this site.

For AL, the site's penetration is better-than-average (deciles 6-to-8, rows 36-37)

both in Dallas and across major U.S. markets. For MC, it is somewhere less favorable than average for the U.S. (deciles 4-5, rows 38-39) but more favorable for Dallas (7<sup>th</sup> decile). While favorable rankings do not indicate "unmet need," they reduce the risk that the market is fundamentally overbuilt.

#### Performance

Despite the relatively favorable penetration rates, combined IL/AL/MC occupancy across Acme plus the two competitors is an awful 74%, according to NICMAP. For confidentiality reasons, NICMAP does not disclose whether the vacancies are concentrated in certain communities or product types.

Typically, an acquisition analysis compares the target's occupancy to surrounding occupancy to determine whether the target can grow into its "fair share" of the market. In this public case study, the target's occupancy isn't known so this comparison is skipped here. Rents are also not disclosed, but

with such low occupancy, rents have little upside potential.

#### Conversion opportunities

Acme's large 113-unit AL with no MC raises the obvious question: if physically possible, should some units be converted to MC?

With only one MC competitor, relatively neutral penetration rate deciles, and likely healthy internal demand from existing AL residents, a conversion is worth exploring. However, its attractiveness depends on better understanding of the performance and positioning of Competitor B-MC.

#### Conclusion

Revenue upside could stem from two areas: (1) if Acme's has far lower occupancy than its competitors but can recapture its fair share of the market; (2) if Acme can convert units to MC.

However, local demand fundamentals are weak, market occupancy & pricing pressure appear poor, and the site is sub-par. If new supply gets built somewhere nearby, it will likely draw off much of the tailwind from projected population growth.

In short, revenue growth will likely come from tactical community strategies rather than from broader market health.

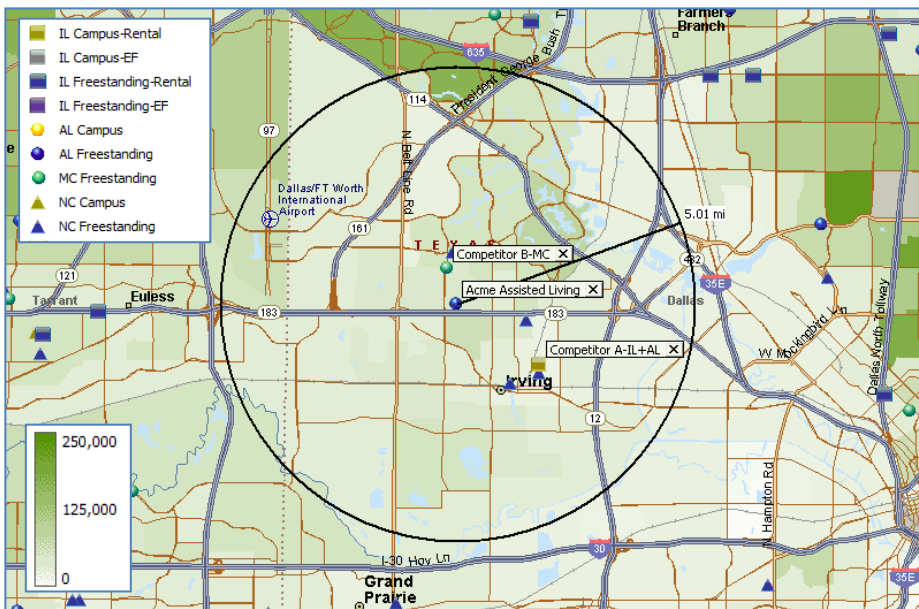
#### Summary

+ Favorable Demand  
○ Neutral Demand  
■ Unfavorable Demand

Affluence	<span style="color: yellow;">○</span>
Density	<span style="color: red;">■</span>
Growth	<span style="color: green;">+</span>
Supply	
Penetration	<span style="color: yellow;">○</span>
Market occupancy	<span style="color: red;">■</span>
Site	
Neighborhood	<span style="color: red;">■</span>
Building	<span style="color: yellow;">○</span>
Occupancy upside	
Empty units*	??
Competitive position	<span style="color: yellow;">○</span>
Rate upside	
Rate increases	<span style="color: red;">■</span>
Revenue mix gains	<span style="color: green;">+</span>

\*In a typical SHA client analysis, a target's empty units are known & assessed.

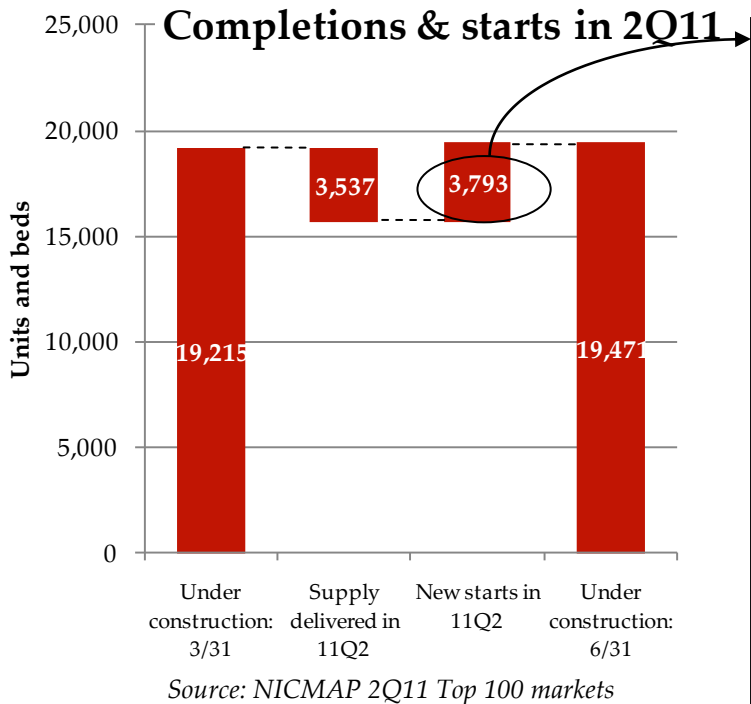
### Median Household Income



Sources: NICMAP 2Q11; AGS 2009

# What's new in senior housing development

Newly listed construction and renovation in NICMAP supply database



	Newly listed supply additions by...							
	... renovation				... ground-up development			
	IL	AL	MC	NC	IL	AL	MC	NC
Albany, NY					0	72	0	0
Austin, TX					0	126	32	0
Baltimore, MD					0	52	32	0
Boston, MA	0	0	0	60				
Bridgeport, CT	0	0	0	9				
Chicago, IL	0	30	0	48	0	22	0	10
Cleveland, OH	0	0	0	100				
Dallas, TX	0	6	0	0	0	126	69	0
Detroit, MI					0	80	0	113
Houston, TX	44	0	0	0	0	95	81	112
Indianapolis, IN					134	56	26	48
Kansas City, MO					0	47	12	0
Lancaster, PA	95	32	52	0				
Los Angeles, CA	0	0	2	0				
Louisville, KY					0	56	22	0
Memphis, TN					80	30	30	0
Milwaukee, WI	0	0	0	13				
Minneapolis, MN	0	0	0	50				
Nashville, TN					0	0	0	124
New York, NY	0	0	0	27	0	53	34	0
Philadelphia, PA	75	20	0	0				
Phoenix, AZ					0	66	0	0
Pittsburgh, PA	0	10	0	0				
Portland, OR	24	12	0	60				
Providence, RI					0	0	60	0
Rochester, NY	102	0	0	0				
Sacramento, CA					0	66	0	0
San Diego, CA					0	80	0	0
San Francisco, CA	0	0	10	0				
Seattle, WA	0	25	20	0				
St. Louis, MO					0	122	44	0
Tampa, FL					0	55	25	0
Tucson, AZ					111	0	0	0
Washington, DC	80	0	0	0	0	66	23	0
Wichita, KS					0	0	24	0
Baton Rouge, LA					0	0	0	0
Charlotte, NC					0	0	0	142
Oklahoma City, OK	0	13	0	0				
Colorado Springs, CO	0	0	0	116				
<b>Total</b>	<b>420</b>	<b>148</b>	<b>84</b>	<b>483</b>	<b>325</b>	<b>1,270</b>	<b>514</b>	<b>549</b>

Source: NICMAP 2Q11

IL- Independent Living units  
 AL- Assisted Living units  
 MC- Memory Care units  
 NC- Nursing Care beds

For further information on the projects summarized here, go to [www.nicmap.org](http://www.nicmap.org).

## Do penetration rates matter?

*Continued from page 1*  
 development decisions. Chasing low penetration neighborhoods can drive a developer out to peripheral sites with risky-low demand density. Plus, avoiding well-developed markets can mean missing a chance to beat low-quality competitors.

The topic merits further research, particularly on penetration rates in local vs. metro markets. Nonetheless, SHA believes that penetration rate is only one factor among many that affect market feasibility. Current occupancy, density both seniors & children-of-seniors, quality of supply, room rates, barriers-to-entry, and other factors all influence market potential.



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