



# FORT CARSON REGIONAL GROWTH PLAN – Housing Forum

*Presented by*



BBC Research & Consulting  
3773 Cherry Creek N. Dr.  
Suite 850  
Denver, CO 80209-3868

303-321-2547 tel

303-399-0448 fax

[www.bbcresearch.com](http://www.bbcresearch.com)

*Presented to*

Stakeholders, Pikes Peak Area  
Council of Governments

***DRAFT***

December 4, 2009

# Agenda

- **Brief Overview of the Fort Carson Regional Growth Model**
- **Overview of the Housing Model and Assumptions**
- **Findings from the Housing Model:**
  - No. of Soldiers living in the barracks
  - No. of Soldiers living in military family housing
  - No. of Soldiers living off-post
    - Renters living off-post
    - Owners living off-post
- **Change in renters and owners over time**
- **Rental vacancy rates by community**
- **Homebuying activity by community**

# Data Sources

## ■ “Assigned and deployed”

- Projections from Garrison Command
- Updated quarterly

## ■ Fort Hood Survey; 675 responses

## ■ Fort Carson survey; 277 responses

## ■ Housing Survey from 2008

- Special data runs
- Focus on accompaniment rate, housing needs

## ■ DEERS data

- Working with PPACG
- Requires data cleaning
- Valuable for number and ages of children

## ■ “Boots on the Ground” — 4<sup>th</sup> ID-G1

- Comprehensive data set of numbers and pay grade of Fort Carson Soldiers

## ■ Department of Defense: “Demographics 2007”

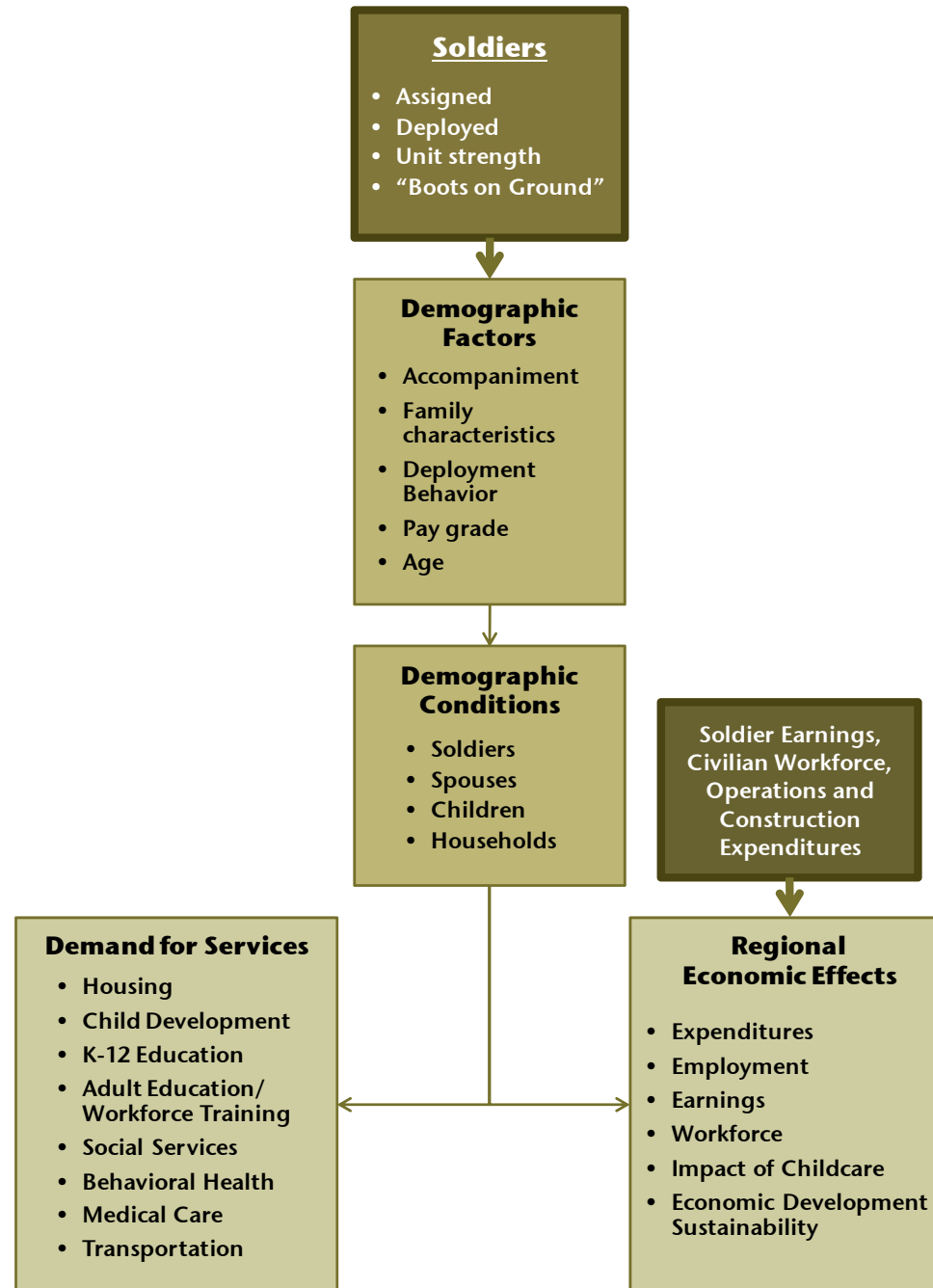
- Military- and Army-wide demographic data

## ■ Colorado Division of Housing Apartment Vacancy Surveys

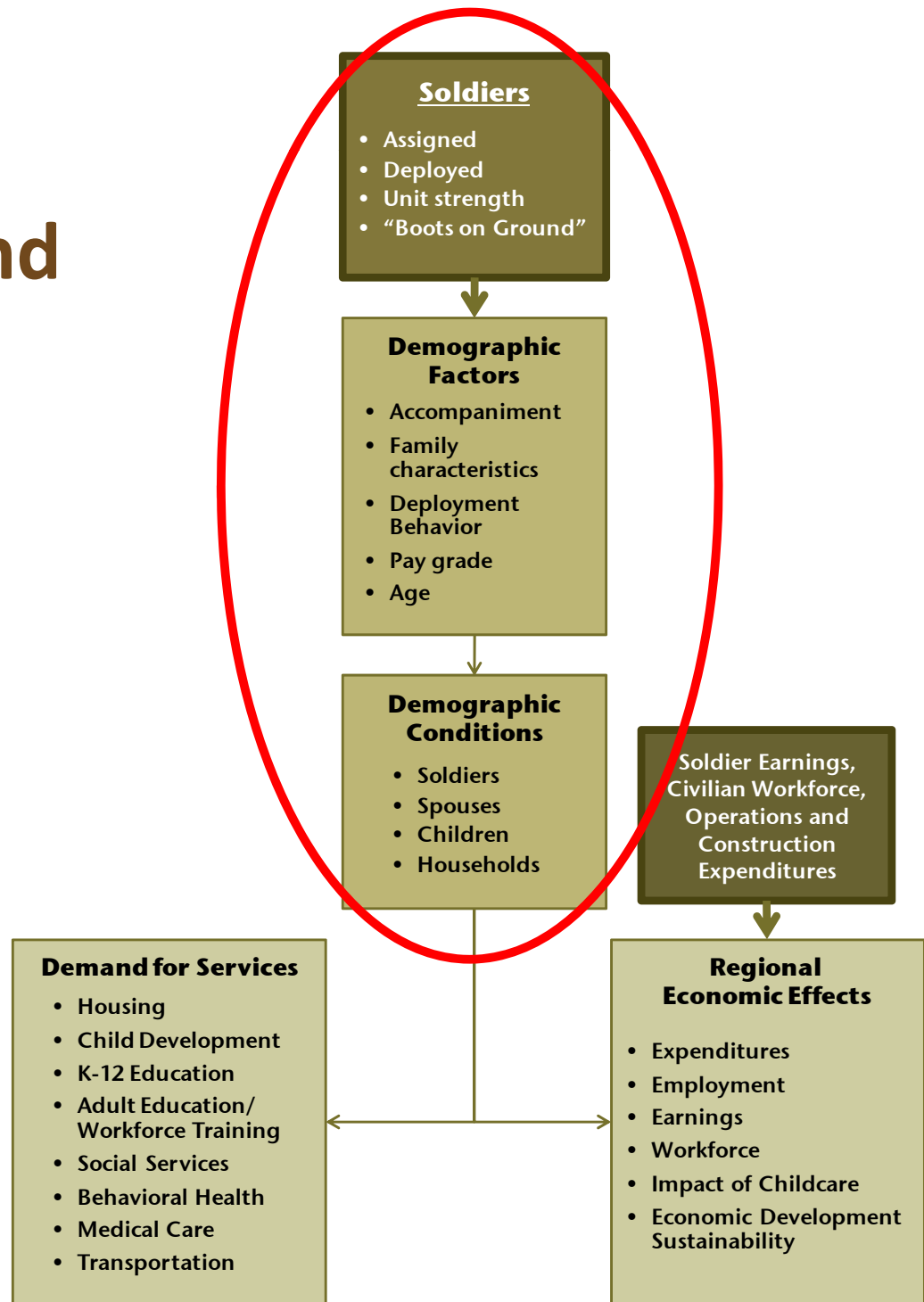
## ■ MLS data (resales)

## ■ New Inventory, MetroStudy

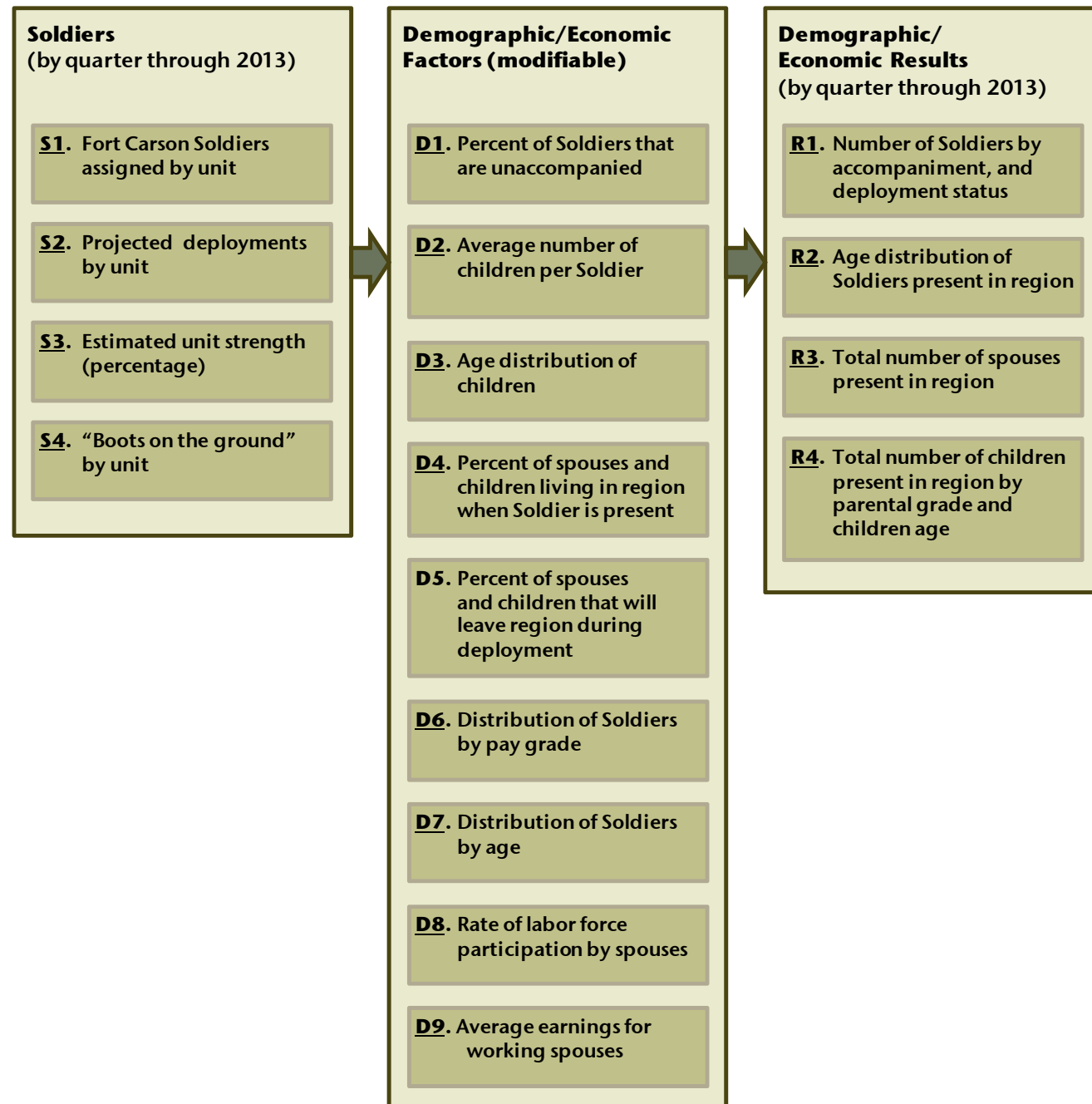
# Where it all begins: *The Regional Growth Model*



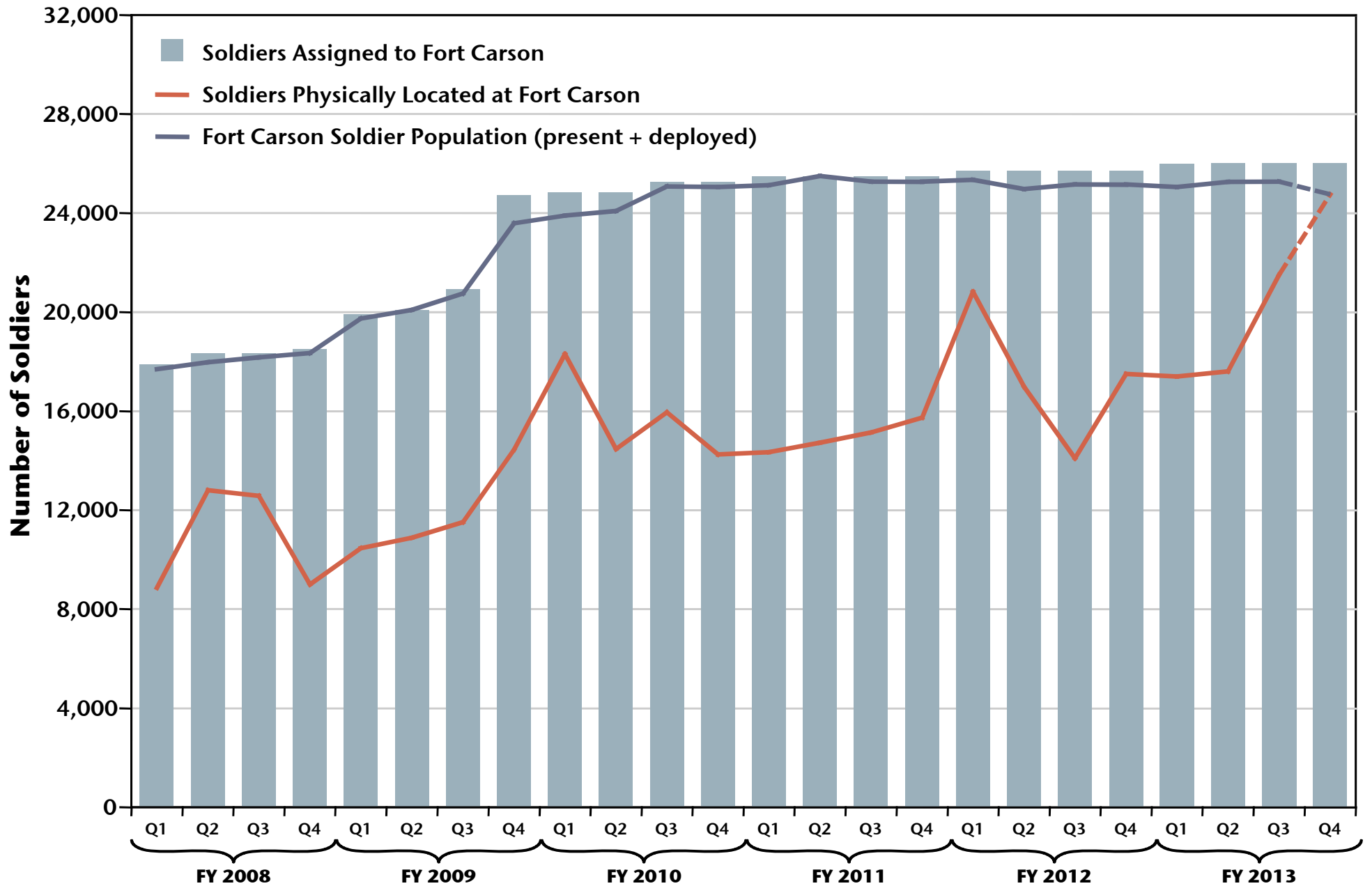
# Demographic Factors Affect Housing Demand



# Demographic Projections

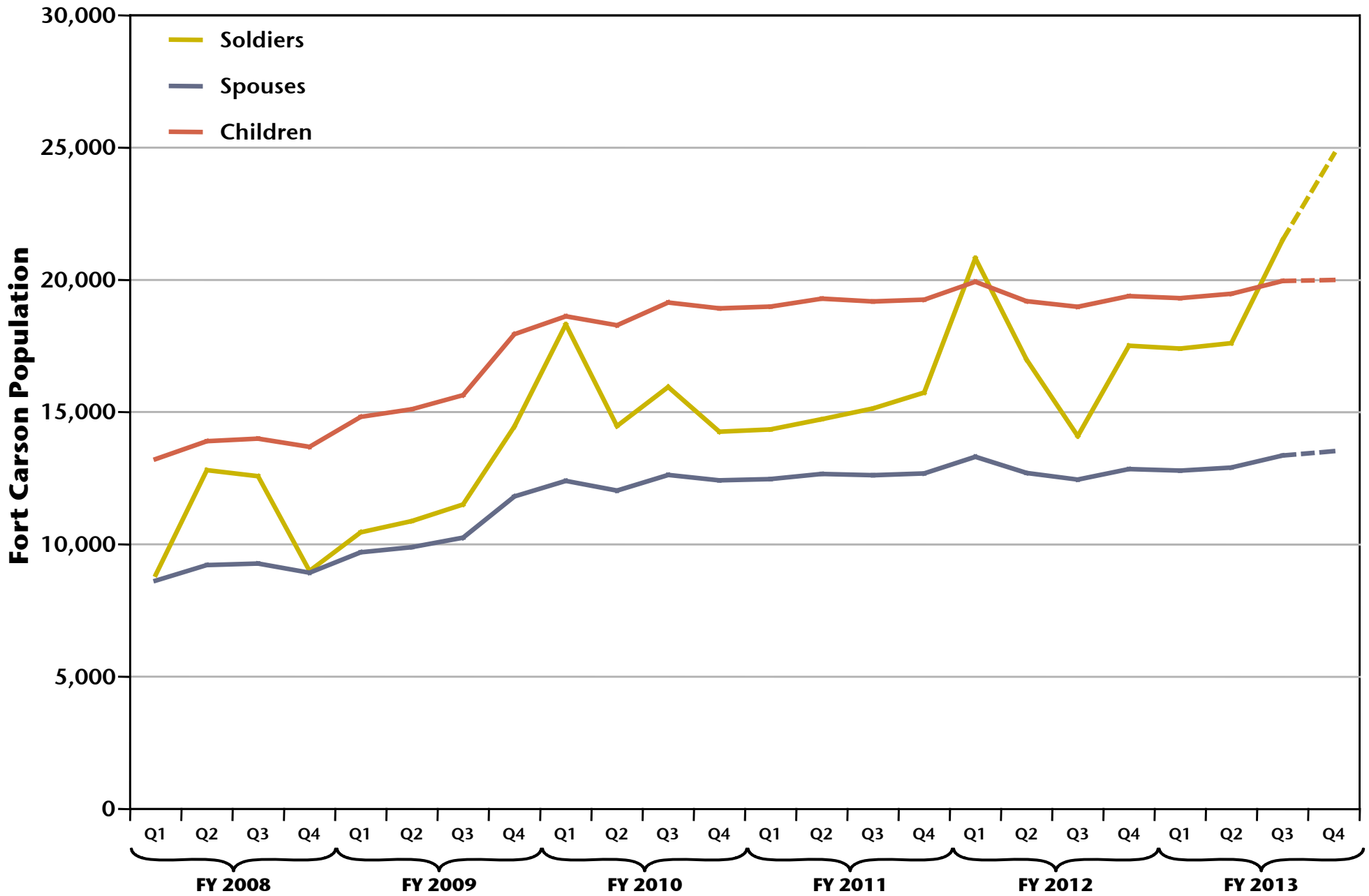


# Soldier Population Summary



Note: Deployment data are not available for Q4 2013. Additionally, deployment cycles are subject to change.

# Population Summary—Physically Present in the Region

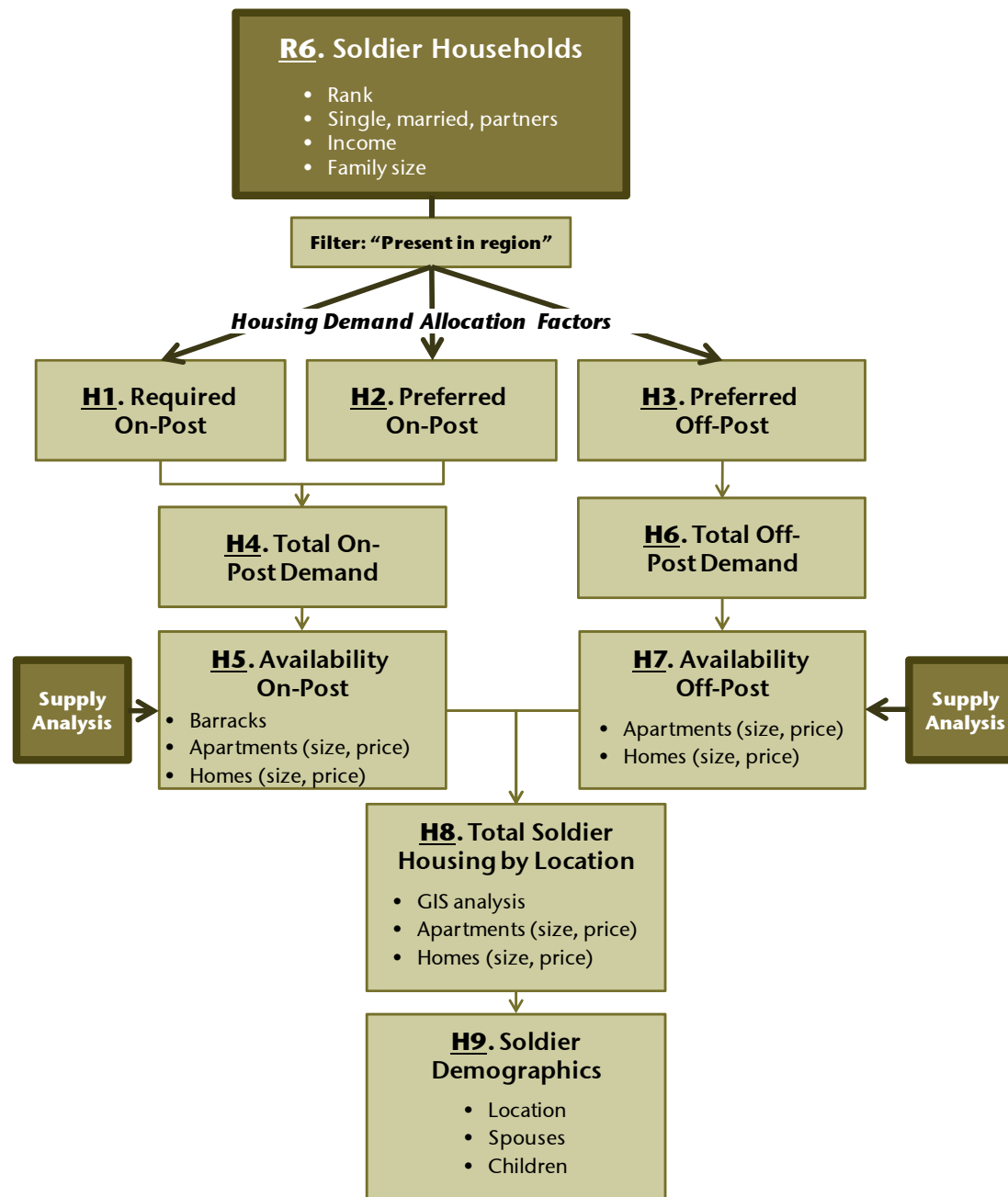


Note: Deployment data are not available for Q4 2013. Additionally, deployment cycles are subject to change.

## Purpose of Housing Analysis:

- Determine what soldiers and their families can afford based on incomes and credit issues for both for sale and rental housing.
- Project housing demand (rental and for-sale) associated with the expansion of Fort Carson.
- Complete a housing analysis that contains an inventory of off- and on-post housing stock and determines the gaps between supply and demand for Fort Carson soldiers and families; this includes a specific review of housing needs in the Fountain Valley.

# How the Housing Model Works



# Housing Model Walk Through

Begin with the number of soldiers present in the region + spouses and children who stay when Soldier deploys.

*(see Handout 1)*



# Assign Soldiers to On-post Housing

- E-1 to E-5 unaccompanied Soldiers are required to live on post in barracks unless vacancy drops below 5%.
- Peak demand for barracks estimated to occur in second quarter 2013 (calendar year) at 7,209 Soldiers.
- Fort Carson Housing Division does not anticipate that the vacancy rate in the barracks will be lower than 5% during the growth model period. *Supply will meet (required) demand for barracks.*
- There are 2,940 units of military family housing currently on post, a projected total of 3,370 during the growth model period and a wait list of approximately 2,000. *Supply will not meet demand for military family housing; those who cannot get a unit will live off post.*

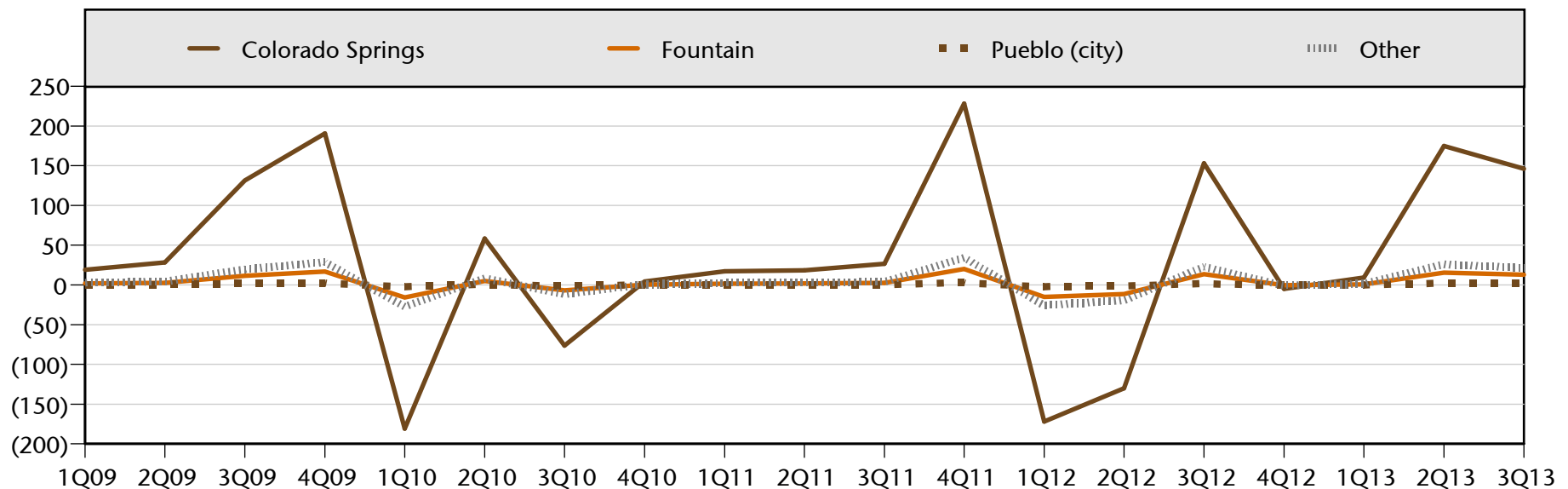
# Assign Soldiers to Off-post Housing

Tenure (renter/owner) varies by pay grade and accompaniment status.

## ■ Rental housing:

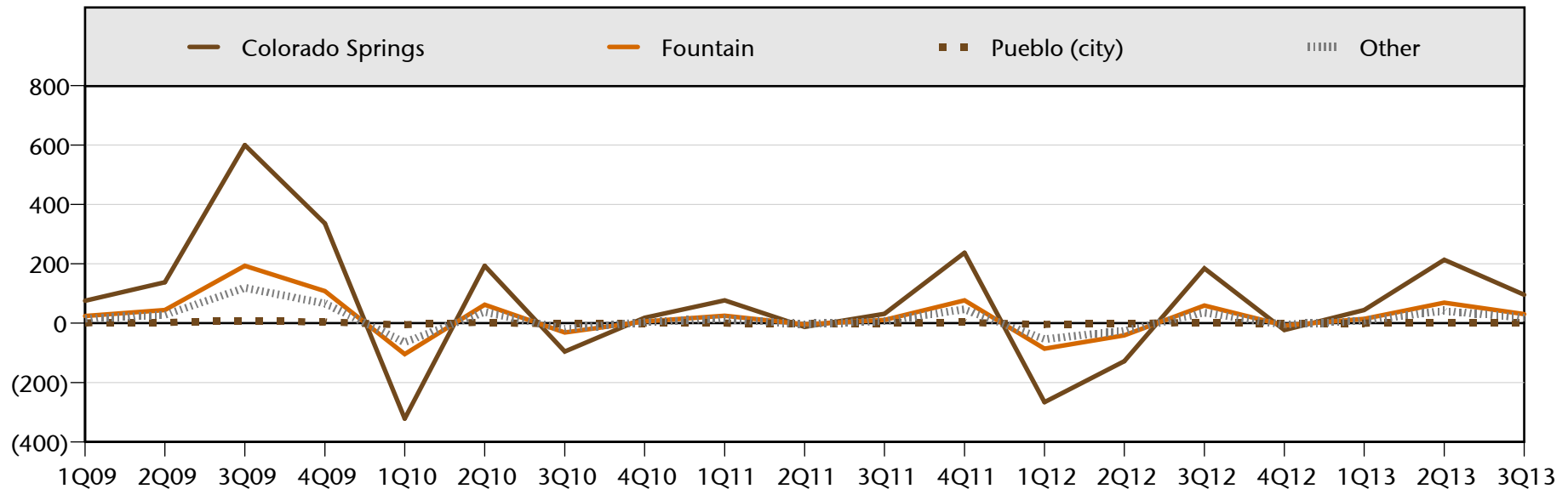
- Begin with 3Q-2009 vacancy rates → determine number of vacant units by type by market area.
- As new renters come into and leave the region, the number of vacant units decrease or increase by Quarter.

## Unaccompanied Renters Living Off-Post



# Assign Soldiers to Off-post Housing

## Accompanied Renters Living Off-Post



- There are enough vacant units—but supply in the areas most desired by Soldiers and their families (Central, Southeast and Southwest Colorado Springs; Fountain Valley) will be tight.

# Assign Soldiers to Off-post Housing

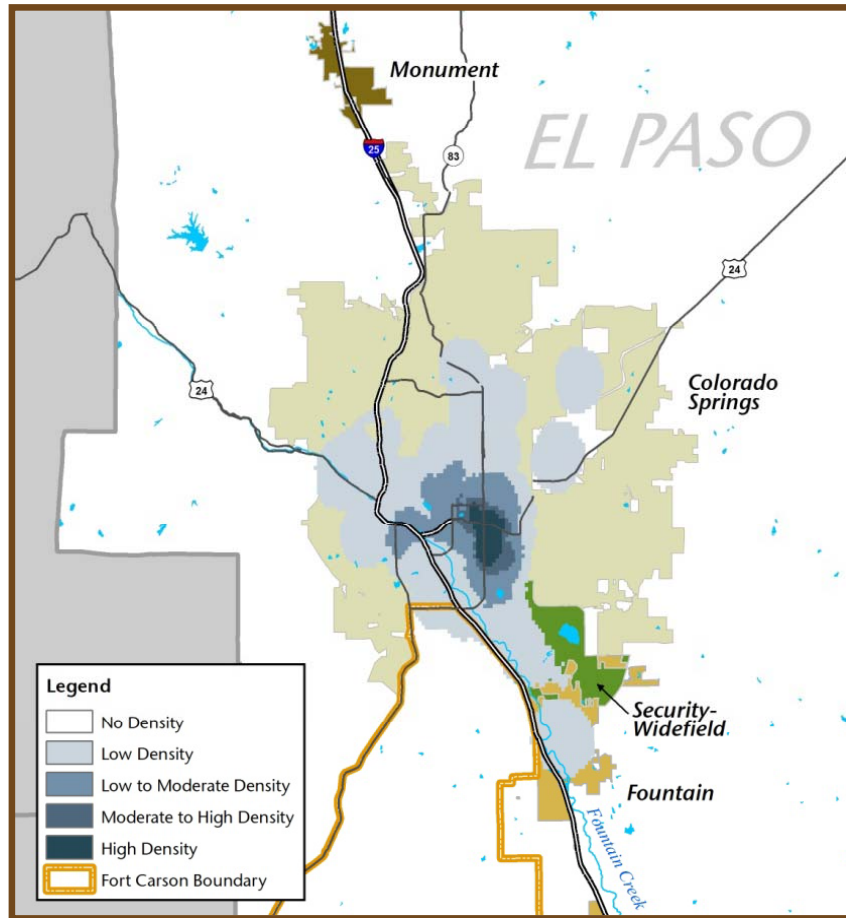
## Homeownership Housing

- Buying is difficult for E-1 through E-7, O-1, O-3, W-1, W-2

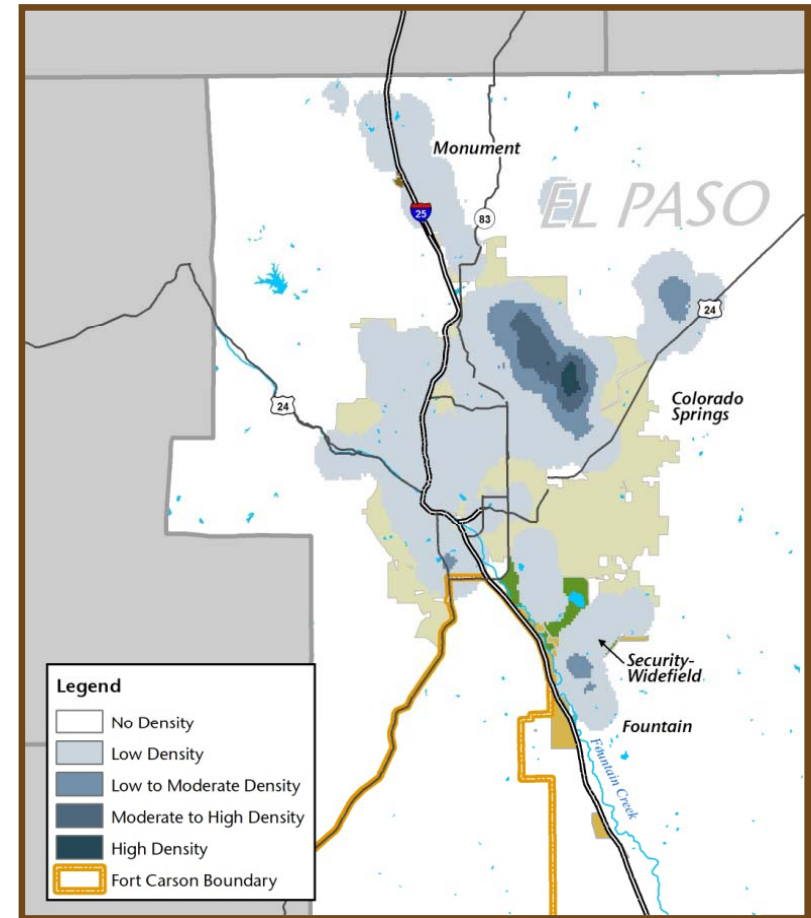
| Pay Grade   | Affordable Mortgage based on Income, no dependents | Affordable Mortgage based on Income, with dependents | No. of Units in: |          |                             |          |           |          |          |          |                   |
|-------------|--|--|------------------|----------|-----------------------------|----------|-----------|----------|----------|----------|-------------------|
|             |  |  | Colorado Springs |          | Fountain/Security/Widefield |          | Remaining |          | Total    |          | Total, both types |
|             |  |  | Attached         | Detached | Attached                    | Detached | Attached  | Detached | Attached | Detached |                   |
| <b>E-1</b>  | N/A, in barracks                                   | \$ 103,202   | 329              | 414      | 19                          | 46       | 23        | 214      | 371      | 674      | 1,045             |
| <b>E-2</b>  | N/A, in barracks                                   | \$ 109,571   | 369              | 490      | 21                          | 55       | 27        | 243      | 417      | 788      | 1,205             |
| <b>E-3</b>  | N/A, in barracks                                   | \$ 116,528   | 427              | 618      | 24                          | 75       | 30        | 279      | 481      | 972      | 1,453             |
| <b>E-4</b>  | N/A, in barracks                                   | \$ 126,749   | 487              | 779      | 28                          | 96       | 32        | 364      | 547      | 1,239    | 1,786             |
| <b>E-5</b>  | N/A, in barracks                                   | \$ 155,055   | 772              | 1,475    | 41                          | 196      | 52        | 660      | 865      | 2,331    | 3,196             |
| <b>E-6</b>  | \$ 169,937   | \$ 182,021   | 966              | 2,250    | 53                          | 320      | 86        | 1,027    | 1,105    | 3,597    | 4,702             |
| <b>E-7</b>  | \$ 195,284   | \$ 206,465   | 1,080            | 2,956    | 53                          | 409      | 106       | 1,311    | 1,239    | 4,676    | 5,915             |
| <b>E-8</b>  | \$ 224,170   | \$ 231,925   | 1,161            | 3,594    | 54                          | 483      | 109       | 1,585    | 1,324    | 5,662    | 6,986             |
| <b>E-9</b>  | \$ 252,796   | \$ 260,701   | 1,220            | 4,102    | 54                          | 543      | 115       | 1,924    | 1,389    | 6,569    | 7,958             |
| <b>O-1</b>  | \$ 142,691   | \$ 151,350   | 729              | 1,371    | 40                          | 177      | 50        | 621      | 819      | 2,169    | 2,988             |
| <b>O-1E</b> | \$ 176,467   | \$ 184,222   | 973              | 2,282    | 53                          | 322      | 87        | 1,036    | 1,113    | 3,640    | 4,753             |
| <b>O-2</b>  | \$ 205,477   | \$ 212,781   | 1,098            | 3,102    | 53                          | 421      | 106       | 1,374    | 1,257    | 4,897    | 6,154             |
| <b>O-2E</b> | \$ 212,713   | \$ 219,715   | 1,122            | 3,250    | 54                          | 444      | 107       | 1,450    | 1,283    | 5,144    | 6,427             |
| <b>O-3</b>  | \$ 240,891   | \$ 246,839   | 1,197            | 3,837    | 54                          | 522      | 110       | 1,752    | 1,361    | 6,111    | 7,472             |
| <b>O-3E</b> | \$ 243,074   | \$ 248,684   | 1,197            | 3,853    | 54                          | 524      | 110       | 1,764    | 1,361    | 6,141    | 7,502             |
| <b>O-4</b>  | \$ 285,102   | \$ 291,427   | 1,269            | 4,513    | 54                          | 570      | 127       | 2,178    | 1,450    | 7,261    | 8,711             |
| <b>O-5</b>  | \$ 306,576   | \$ 314,783   | 1,294            | 4,747    | 54                          | 572      | 131       | 2,354    | 1,479    | 7,673    | 9,152             |
| <b>O-6</b>  | \$ 335,051   | \$ 342,354   | 1,323            | 5,002    | 54                          | 583      | 134       | 2,589    | 1,511    | 8,174    | 9,685             |
| <b>O-7</b>  | \$ 449,382   | \$ 456,309   | 1,348            | 5,705    | 58                          | 592      | 148       | 3,078    | 1,554    | 9,375    | 10,929            |
| <b>O-8</b>  | \$ 502,971   | \$ 509,898   | 1,356            | 5,865    | 58                          | 592      | 150       | 3,214    | 1,564    | 9,671    | 11,235            |
| <b>O-9</b>  | \$ 545,300   | \$ 552,227   | 1,356            | 5,946    | 58                          | 593      | 150       | 3,281    | 1,564    | 9,820    | 11,384            |
| <b>O-10</b> | \$ 614,633   | \$ 621,560   | 1,363            | 6,044    | 58                          | 593      | 150       | 3,380    | 1,571    | 10,017   | 11,588            |
| <b>W-1</b>  | \$ 168,938   | \$ 180,533   | 962              | 2,232    | 53                          | 319      | 83        | 1,020    | 1,098    | 3,571    | 4,669             |
| <b>W-2</b>  | \$ 197,613   | \$ 204,502   | 1,073            | 2,899    | 53                          | 403      | 105       | 1,286    | 1,231    | 4,588    | 5,819             |
| <b>W-3</b>  | \$ 226,168   | \$ 232,831   | 1,161            | 3,598    | 54                          | 484      | 109       | 1,590    | 1,324    | 5,672    | 6,996             |
| <b>W-4</b>  | \$ 272,122   | \$ 277,129   | 1,249            | 4,325    | 54                          | 563      | 124       | 2,044    | 1,427    | 6,932    | 8,359             |
| <b>W-5</b>  | \$ 303,410   | \$ 308,755   | 1,289            | 4,699    | 54                          | 572      | 129       | 2,312    | 1,472    | 7,583    | 9,055             |

# Assign Soldiers to Off-post Housing

Location of Listings \$100,000 or less, El Paso County, 2Q 2008 to 2Q 2009



Location of Listings \$200,000 to \$300,000, El Paso County, 2Q 2008 to 2Q2009



## Credit Problems?

- An analysis of credit bureau data of households living in the Central Colorado Springs and the Fountain Valley found:
  - Median credit score of 672.
  - The overall nationwide median score according to FICO (2006) is 723. Sixty percent of FICO scores nationwide fall between 650 and 799.
  - Anecdotal concerns about Soldiers' ability to buy, rent because of credit issues.
  - High levels of consumer debt may compromise ability to buy at reasonable interest rates.

# Housing Calculator

| If your pay grade and BAH is...<br>Pay Grade | Basic Allowance for Housing |                            | If you have dependents, the most you can afford is: | Monthly Income Left after Paying Your Mortgage: | If you do <i>not</i> have dependents, the most you can afford is: | Monthly Income Left after Paying Your Mortgage: |
|--|-----------------------------|----------------------------|---|---|---|---|
|  | With Dependents             | With <i>out</i> Dependents |   |   |   |   |
| E-1  | \$ 1,018                    | N/A, in barracks           | \$103,202   | \$ 1,919  | N/A, in barracks  |   |
| E-2  | \$ 1,018                    | N/A, in barracks           | \$109,571   | \$ 2,037  | N/A, in barracks  |   |
| E-3  | \$ 1,018                    | N/A, in barracks           | \$116,528   | \$ 2,167  | N/A, in barracks  |   |
| E-4  | \$ 1,018                    | N/A, in barracks           | \$126,749   | \$ 2,357  | N/A, in barracks  |   |
| E-5  | \$ 1,124                    | N/A, in barracks           | \$155,055   | \$ 2,883  | N/A, in barracks  |   |
| E-6  | \$ 1,285                    | \$ 964                     | \$182,021   | \$ 3,385  | \$169,937   | \$ 1,872  |
| E-7  | \$ 1,322                    | \$ 1,025                   | \$206,465   | \$ 3,839  | \$195,284   | \$ 2,282  |
| E-8  | \$ 1,362                    | \$ 1,156                   | \$231,925   | \$ 4,312  | \$224,170   | \$ 2,688  |
| E-9  | \$ 1,416                    | \$ 1,206                   | \$260,701   | \$ 4,848  | \$252,796   | \$ 3,171  |
| W-1  | \$ 1,286                    | \$ 978                     | \$180,533   | \$ 3,357  | \$168,938   | \$ 1,940  |
| W-2  | \$ 1,338                    | \$ 1,155                   | \$204,502   | \$ 3,803  | \$197,613   | \$ 2,296  |
| W-3  | \$ 1,387                    | \$ 1,210                   | \$232,831   | \$ 4,329  | \$226,168   | \$ 2,772  |
| W-4  | \$ 1,427                    | \$ 1,294                   | \$277,129   | \$ 5,153  | \$272,122   | \$ 3,543  |
| W-5  | \$ 1,473                    | \$ 1,331                   | \$308,755   | \$ 5,741  | \$303,410   | \$ 4,088  |
| O-1E   | \$ 1,330                    | \$ 1,124                   | \$184,222   | \$ 3,425  | \$176,467   | \$ 1,934  |
| O-2E   | \$ 1,380                    | \$ 1,194                   | \$219,715   | \$ 4,085  | \$212,713   | \$ 2,538  |
| O-3E   | \$ 1,434                    | \$ 1,285                   | \$248,684   | \$ 4,624  | \$243,074   | \$ 3,012  |
| O-1  | \$ 1,142                    | \$ 912                     | \$151,350   | \$ 2,814  | \$142,691   | \$ 1,518  |
| O-2  | \$ 1,281                    | \$ 1,087                   | \$212,781   | \$ 3,956  | \$205,477   | \$ 2,511  |
| O-3  | \$ 1,385                    | \$ 1,227                   | \$246,839   | \$ 4,590  | \$240,891   | \$ 3,029  |
| O-4  | \$ 1,493                    | \$ 1,325                   | \$291,427   | \$ 5,419  | \$285,102   | \$ 3,753  |
| O-5  | \$ 1,568                    | \$ 1,350                   | \$314,783   | \$ 5,853  | \$306,576   | \$ 4,128  |
| O-6  | \$ 1,581                    | \$ 1,387                   | \$342,354   | \$ 6,366  | \$335,051   | \$ 4,620  |
| O-7  | \$ 1,599                    | \$ 1,415                   | \$456,309   | \$ 8,485  | \$449,382   | \$ 6,718  |
| O-8  | \$ 1,599                    | \$ 1,415                   | \$509,898   | \$ 9,481  | \$502,971   | \$ 7,714  |
| O-9  | \$ 1,599                    | \$ 1,415                   | \$552,227   | \$ 10,268                                       | \$545,300   | \$ 8,501  |
| O-10   | \$ 1,599                    | \$ 1,415                   | \$621,560   | \$ 11,557                                       | \$614,633   | \$ 9,791  |

# Test: Impact of Fort Hood on Housing Market

**Exercise to compare estimated quantitative impact with actual change in rental absorption and purchase transactions:**

**Change from 1Q09 to 3Q09**

|  | 1Q09   | 3Q09   | Change (net) |  |
|--|--------|--------|--------------|--|
| <b>Soldiers assigned</b>                                       | 20,086 | 24,730 | 4,644        |  |
| <b>Deployed</b>  | 9,206  | 9,148  | (58)         |  |
| <b>Present (physically)</b>                                    | 10,880 | 14,442 | 3,562        |  |
| <b>Deployed Soldiers with families living in region</b>        | 4,176  | 4,191  | 15           |  |
| <b>On-post housing:</b>  |        |        |              |  |
| Living in barracks   | 3,648  | 4,842  | 1,194        |  |
| Living in military family housing                              | 2,940  | 2,940  | -            |  |
| <b>Off-post housing:</b>                                       |        |        |              |  |
| Unaccompanied Soldiers   | 962    | 1,276  | 315          |  |
| <i>Renters</i>   | 696    | 924    | 228          |  |
| <i>Owners</i>  | 265    | 352    | 87           |  |
| Accompanied Soldiers   | 7,509  | 9,534  |              |  |
| <i>Renters</i>   | 3,955  | 5,090  | 1,136        |  |
| <i>Owners</i>  | 3,554  | 4,444  | 889          |  |
| <b>Total change in rental demand</b>                           |        |        | <b>1,364</b> | <b>Potential Percent<br/>Attributable to<br/>Ft. Carson:</b> |
| <b>Total change in owner demand</b>                            |        |        | <b>976</b>   |  |
| <b>v. rental units absorbed (2Q and 3Q)</b>                    |        |        | <b>1,594</b> | <b>86%</b>   |
| <b>v. purchase transactions (2Q and 3Q, Col. Springs only)</b> |        |        | <b>4,993</b> | <b>20%</b>   |

# Key Assumptions in Housing Model

- The majority of families stay in the Fort Carson region during deployment
- Unaccompanied, off-post renters:
  - About 25% rent units together

| Pay Grade       | Homeowners | Renters |
|-----------------|------------|---------|
| <b>Officers</b> |            |         |
| O7+             |            |         |
| O6              | 88%        | 13%     |
| O5              | 89%        | 11%     |
| O4              | 80%        | 20%     |
| O3              | 70%        | 30%     |
| O2              | 44%        | 56%     |
| O1              | 40%        | 60%     |
| <b>Warrants</b> |            |         |
| W5              | 100%       | 0%      |
| W4              | 93%        | 7%      |
| W3              | 78%        | 22%     |
| W2              | 73%        | 27%     |
| W1              | 77%        | 23%     |
| <b>Enlisted</b> |            |         |
| E9              | 71%        | 29%     |
| E8              | 57%        | 43%     |
| E7              | 52%        | 48%     |
| E6              | 52%        | 48%     |
| E5              | 35%        | 65%     |
| E4              | 20%        | 80%     |
| E3              | 11%        | 89%     |
| E2              | 8%         | 92%     |
| E1              | 0%         | 100%    |

# Key Assumptions... (cont'd)

## Locational preferences:

| Living in...         | Accompanied | Unaccompanied |
|----------------------|-------------|---------------|
| Colorado Springs     | 65%         | 80%           |
| Fountain             | 21%         | 7%            |
| Security/Widefield   | 3%          | 1%            |
| Pueblo/Pueblo West   | 1%          | 1%            |
| Other unincorporated | 10%         | 11%           |
| <b>Total</b>         | <b>100%</b> | <b>100%</b>   |

| Proportion of renters in single family homes |     |
|--|-----|
| Accompanied Soldiers                         | 50% |
| Unaccompanied Soldiers                       | 65% |

## Key Assumptions... (cont'd)

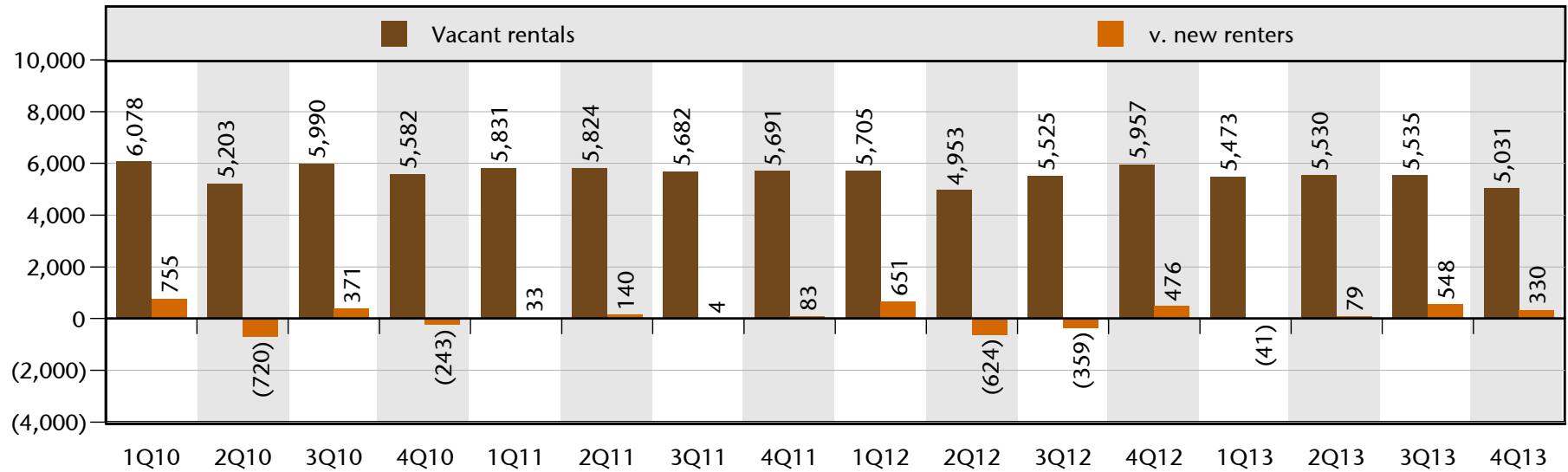
- Affordability means that no more than 30% of gross household income can be used for housing costs, which includes rent/mortgage payment, utilities, hazard insurance, property taxes and PMI.
- Mortgage loan terms: 30 year fixed conventional loan, 5% downpayment, 5.5% interest rate. 75% of a household's allowable monthly housing payment is used toward the principle and interest; 25% is reserved for utilities, hazard insurance, property taxes and PMI.
- We do not assume that spouse income contributes to the rent/mortgage payment because:
  - About half of spouses are estimated to work outside the home,
  - Their average salaries are relatively low (\$25,000/year),
  - We do not have current data on how well spouses have been able to find employment in the current economy.
- We assume that rent and home prices rise consistent with pay grade increases—that is, household purchasing power is neither increased nor decreased over time.

## Key Assumptions... (cont'd)

### Qualitative assessments and survey findings:

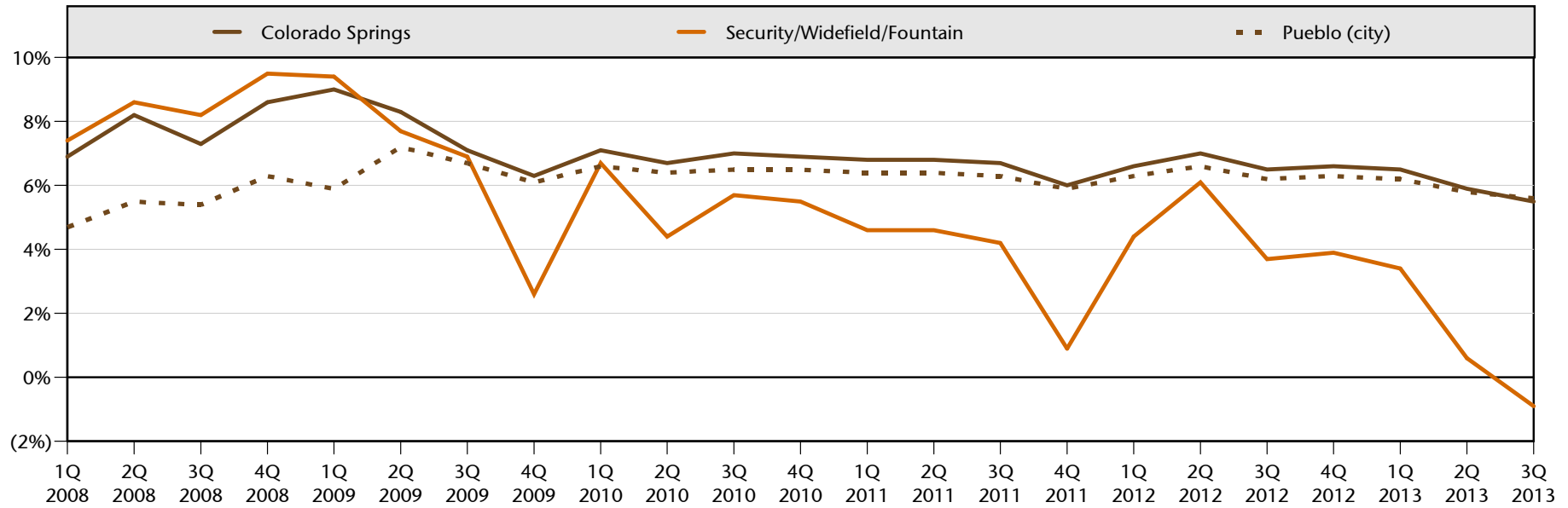
- Anecdotally, we are hearing that families are reluctant to buy because of the economy and uncertainty about the war. This is confirmed in the survey data: Most common reason soldiers haven't bought in our July survey was "I don't want to right now."
- Survey data suggest Soldiers are happy with their current living arrangements (82% say they are living where they want to be). This is the case even though Soldiers were less likely to rent or buy a single family home than they anticipated they would before they moved.
- Preferences—not inability to get a mortgage or find a home they can afford—is the reason why Soldiers aren't buying.

# Quantitative Findings: *Rental Supply in Region Plentiful*



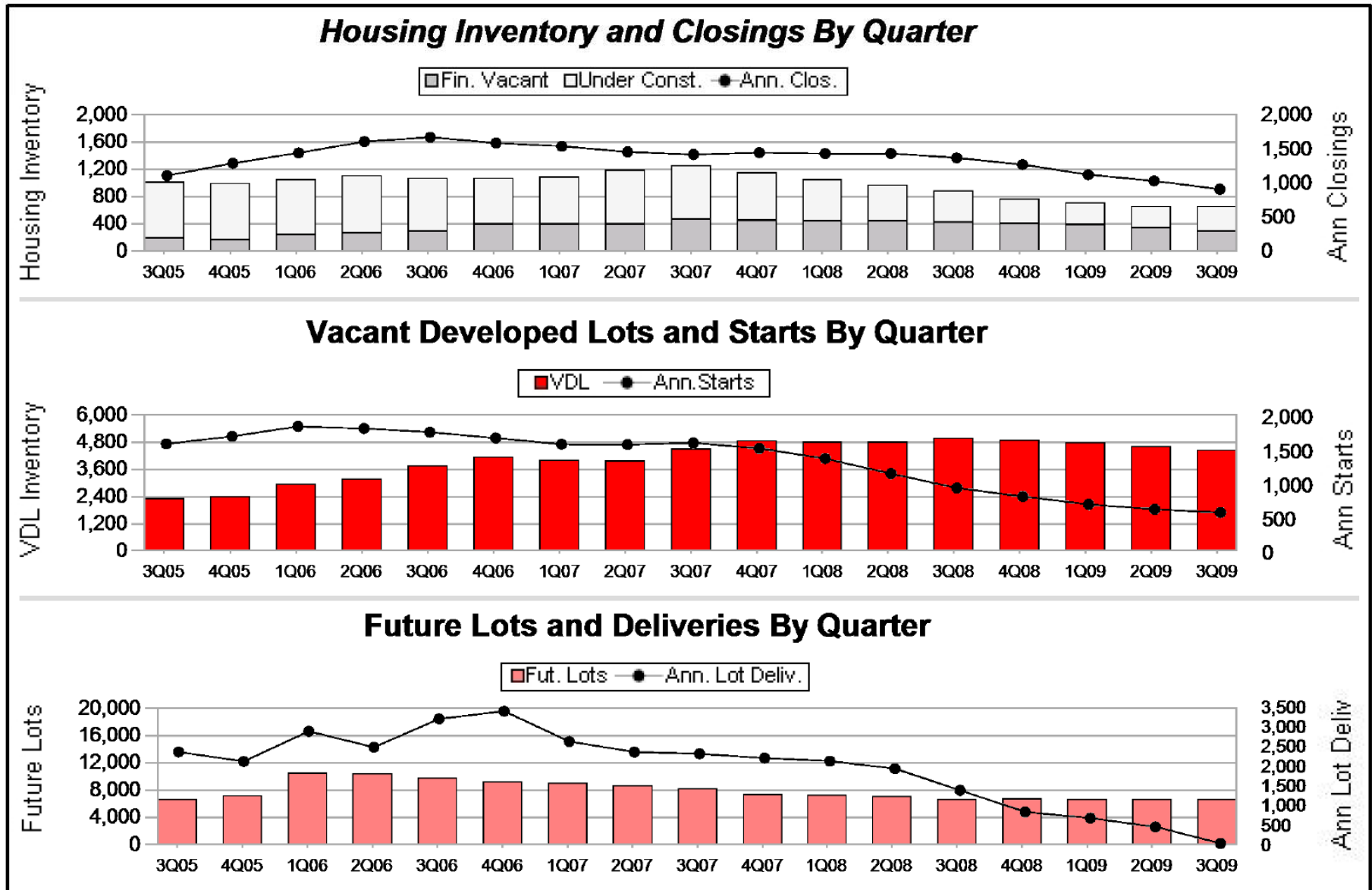
# Quantitative Findings:

## *Rental Vacancy Rates Will Decline and Stabilize*



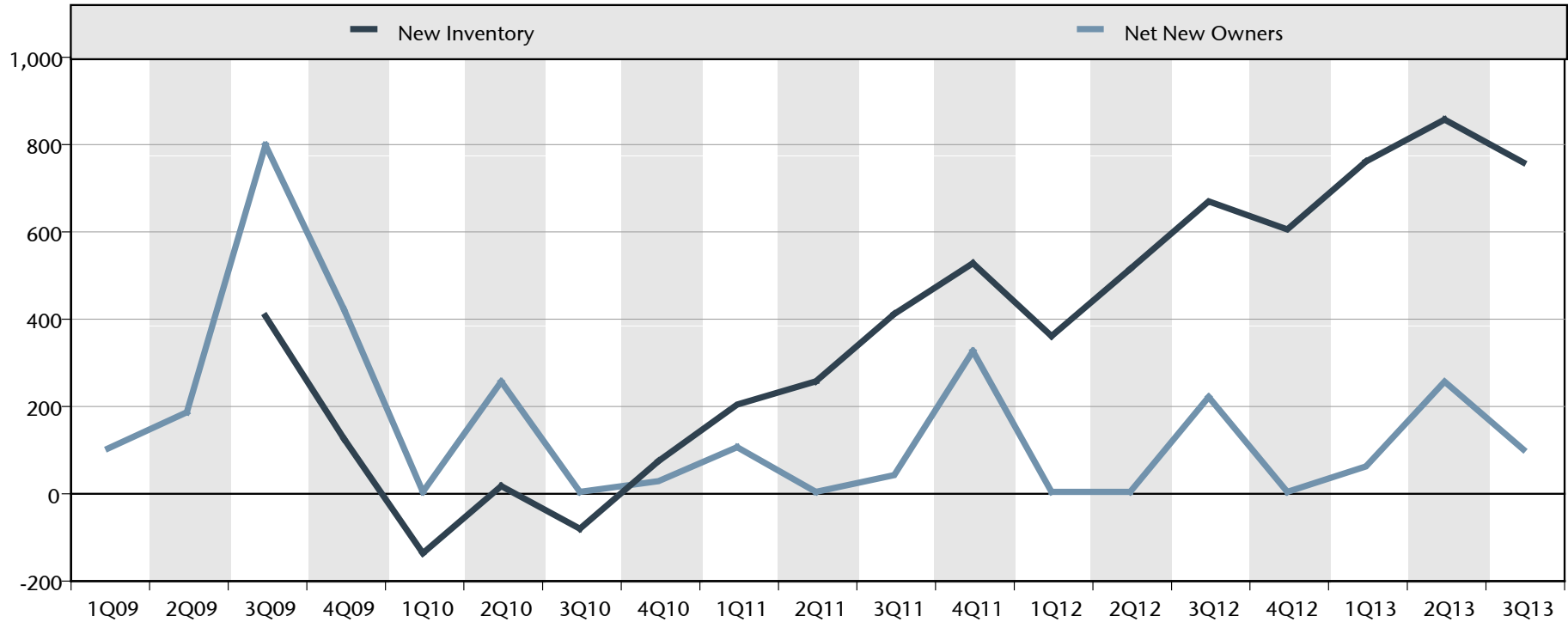
# Quantitative Findings:

*New Inventory has dropped significantly in 2009*



Source: MetroStudy Denver.

# Quantitative Findings: *Net New Owners v. Potential Inventory*



Source: BBC Research & Consulting, MLS and MetroStudy.

**Now...**

**Breakout sessions to get  
your comments and feedback**

