

## Executive Summary

June 24, 2008

# IRON RANGE HOUSING: Planning for Growth

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### Prepared for

Range Readiness Initiative: Housing Team

- Arrowhead Economic Opportunities Agency (AEOA)
- Arrowhead Regional Development Commission (ARDC)
- Greater Minnesota Housing Fund (GMHF)
- Itasca County Board of Realtors
- Itasca County HRA
- Itasca Housing Coalition
- Kootasca
- Minnesota Housing
- Minnesota Housing Partnership
- Northern Minnesota Builders Association
- Range Association of Realtors
- Saint Louis County HRA

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# Executive Summary

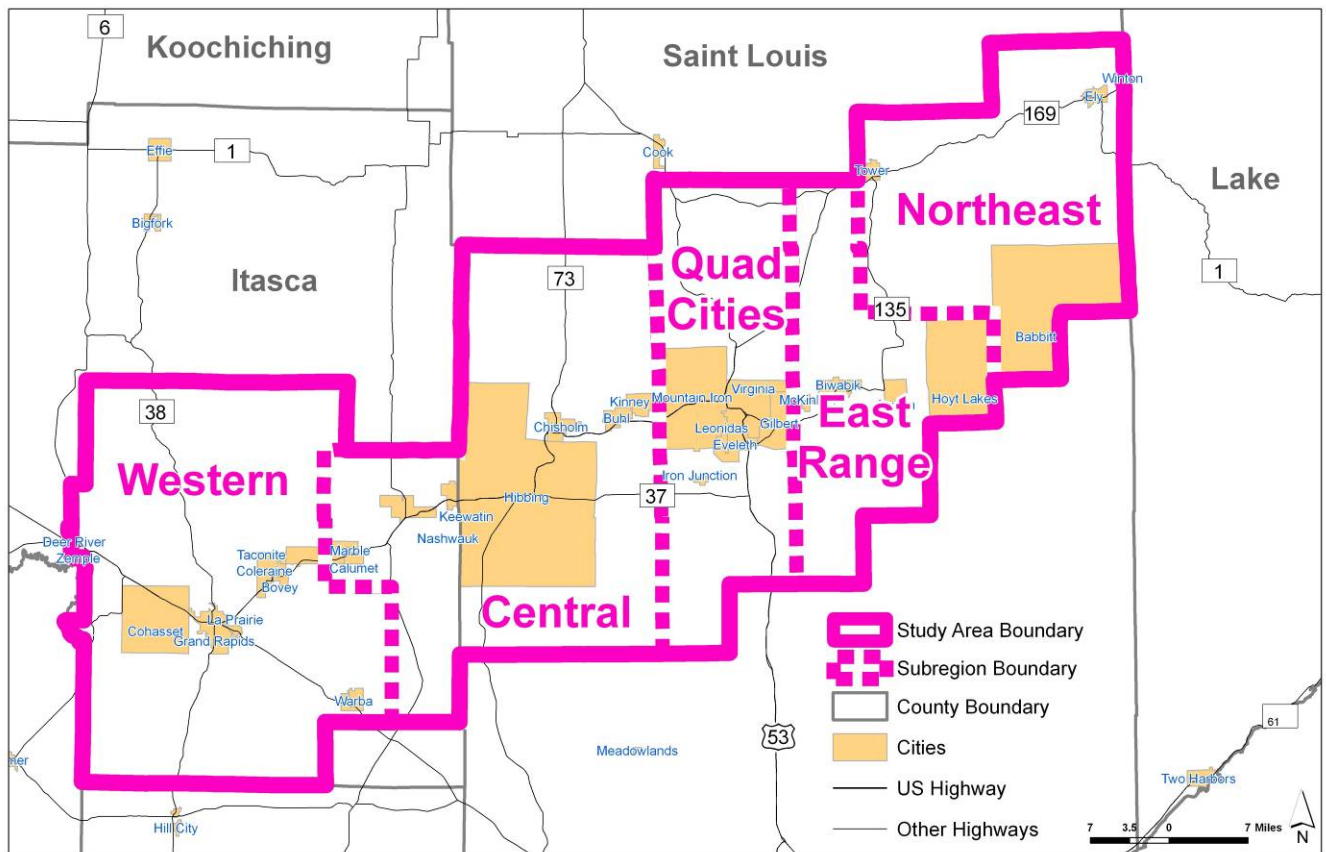
## STUDY OBJECTIVE

The Housing Team of the Range Readiness Initiative (RRI) retained Bonestroo, Inc. (Bonestroo) to conduct a housing study to assess the projected need for housing in the Iron Range region based on proposed and pending economic development.

Due to the rapidly evolving nature of economic development in the Iron Range, the housing study is designed to be dynamic and can respond to change in the marketplace as new jobs and housing are created. By quantifying local housing needs and opportunities, this study will help the Range Readiness Initiative to: 1) identify housing production capacity and need for added capacity; 2) inform planning opportunities by housing type; 3) identify opportunities geographically; 4) help attract resources for plan implementation; and 5) support further planning, and local and regional collaboration.

## STUDY AREA

The Study Area incorporates 31 communities and 54 townships covering over 2,000 square miles of portions of Itasca and St. Louis Counties. From east to west, the Study Area spans more than 100 miles and generally straddles the Highway 169 corridor. Because few persons are willing to commute over 50 miles for jobs, schools, and shopping, the Study Area was broken down into five subregions for analytical purposes.



JURISDICTIONS INCLUDED IN THE STUDY AREA

<u>Western</u>	<u>Central</u>	<u>Quad Cities</u>	<u>East Range</u>	<u>Northeast</u>
Bovey city	Buhl city	Evelth city	Aurora city	Babbitt city
Cohasset city	Calumet city	Gilbert city	Bwabik city	Ely city
Coleraine city	Chisholm city	Iron Junction city	Hbyt Lakes city	Tower city
Deer River city	Hbbing city	Leonidas city	McKinley city	Winton city
Grand Rapids city	Keewatin city	Mountain Iron city	Bwabik twp	Breitung twp
La Prairie city	Kirney city	Virginia city	Rke twp	Eagles Nest twp
Taconite city	Marble city	Angora twp	Vermilion Lake twp	Embarrass twp
Warba city	Nashwauk city	Clinton twp	White twp	Kugler twp
Zemple city	Balkan twp	Fayal twp	Hay Lake UT	Morse twp
Arbo twp	Cherry twp	McDavitt twp	Mud Hen Lake UT	Waasa twp
Balsam twp	French twp	Sandy twp	Tikander Lake UT	Bear Head Lake UT
Blackberry twp	Goodland twp	Wuori twp		Birch Lake UT
Deer River twp	Great Scott twp	Camp A Lake UT		
Feeley twp	Greenway twp	Hikkala Lake UT		
Grand Rapids twp	Iron Range twp	Pfeiffer Lake UT		
Harris twp	Lavell twp	Sand Lake UT		
Lawrence twp	Lone Pine twp			
Spang twp	Nashwauk twp			
Spilthand twp	Dark River UT			
Trout Lake twp	Janette Lake UT			
Wabana twp	Leander Lake UT			
Wildwood twp	McCormack UT			
Deer Lake UT				
Little Sand Lake UT				

## **METHODOLOGY**

The methodology applied to achieve the study objective was a supply and demand analysis. A detailed description of the methodology will be included in the full report. Elements of the analysis are as follows:

### **Demand Analysis**

- Analysis of location, wages, and timing of proposed new jobs
- Analysis of local labor force to determine the number of persons ready and available to fill newly created jobs
- Analysis of demographic characteristics to determine likelihood of newcomers to rent or own
- Analysis of community characteristics and proximity to job sites to determine which subregion newcomers would seek housing

### **Supply Analysis**

- Analysis of 2000 Census data to determine a benchmark of housing supply
- Collect and analyze construction data since 1999 to determine number of housing units built since 1999
- Collect and analyze rental vacancy information to determine the number of available rental units
- Collect and analyze for-sale listings to determine price and quantity of for-sale homes available
- Inventory of mobile home park pads, hotel/motel rooms, and campgrounds site to determine potential supply of temporary housing units

## DATA SOURCES

Retrieving data necessary for the housing study required a great deal of cooperation and collaboration with both the public and private sectors. The following is a list of sources and the type of data they provided.

Data Source	Type of Data
Arrowhead Regional Development Commission	Lot supply, assessment of housing conditions
Iron Range Resources	Employment projections: number of permanent jobs, number of temporary jobs, estimated start date and duration
2000 US Census	Demographics: population, households, age distribution, household type, and income  Housing characteristics: age of homes, tenure of occupant, type of homes, historic vacancies, seasonal homes, number of bedrooms, and historic home values
Minnesota Department of Employment and Economic Development	Labor force data: size of labor force, number employed, and number unemployed
US Department of Labor: Bureau of Labor Statistics	National labor force trends, national data on wages associated with mining, power plant, and construction industries
UMD Labovitz School of Business and Economics, Bureau of Business and Economic Research	Spin-off rate of job creation due to increased economic activity from new mining jobs
Minnesota Housing	Rental information of financially assisted projects
Minnesota Housing Partnership	Previous housing studies conducted in the Study Area
HUD	Rental information of financially assisted projects
USDA Rural Development	Rental information of financially assisted projects
Itasca County Assessor	Number of homes built since 1999, home values, supply of vacant lots
St. Louis County Assessor	Number of homes built since 1999, home values, supply of vacant lots
Itasca County Board of Realtors	Number of active for-sale homes listed on MLS by price
Range Association of Realtors	Number of active for-sale homes listed on MLS by price
Rental Property Managers and Owners in the Study Area	Rental information (number of units, vacancies, rents)
Communities in the Study Area	Number of homes built since 1999, active subdivisions with available lots, pending residential development, lists of apartments

**FINDINGS**

Because economic development in the region is evolving, almost on a daily basis, the study tested three job growth scenarios to illustrate how housing needs may differ depending on when, where, and which projects actually come to fruition. Below is a description of the three job growth scenarios:

<b>Job Growth Scenarios</b>		
<b>"Low"</b>	<b>"Medium"</b>	<b>"High"</b>
760 Direct Permanent Jobs	1,200 Direct Permanent Jobs	2,410 Direct Permanent Jobs
1,180 Spin-Off Permanent Jobs	1,880 Spin-Off Permanent Jobs	3,740 Spin-Off Permanent Jobs
1,970 Peak Temporary Jobs	2,520 Peak Temporary Jobs	3,020 Peak Temporary Jobs
List of Industrial Developments	List of Industrial Developments	List of Industrial Developments
1. Minnesota Power 2. Essar/MN Steel 3. Mesabi Nugget	1. Minnesota Power 2. Essar/MN Steel 3. KeeTac/US Steel 4. Mesabi Nugget 5. PolyMet	1. Minnesota Power 2. Excelsior Energy 3. Essar/MN Steel 4. KeeTac/US Steel 5. Mesabi Nugget 6. PolyMet 7. Franconia Minerals 8. Duluth Metals

The tables on the following pages display the number of units needed for each of the three job growth scenarios. The tables of housing need are broken down by subregion, year, tenure, and price. The affordability of units is based on how much a given income can budget for housing. It is assumed that 30% of a household's budget can be devoted to housing. For those interested in purchasing a home, the amount of mortgage that is affordable is based on 0% down, 6% interest, and 30-year fixed rate.

Where negative numbers appear in the tables, this represents a current oversupply of units in the market.

## ADDITIONAL UNITS NEEDED: "LOW" JOB GROWTH SCENARIO

Pricing assumptions: For-sale: 0% down, 6% int; 30-yr fixed; Rental: 30% of income toward housing

TOTAL STUDY REGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	20	30	112	98	66	77	404
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	67	64	129	104	77	77	518
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	110	69	140	109	83	85	595
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	102	62	122	91	73	80	529
<b>Total Additional For-Sale Units Needed Each Year</b>	<b>299</b>	<b>226</b>	<b>502</b>	<b>401</b>	<b>299</b>	<b>319</b>	<b>2,046</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	32	21	57	32	11	11	164
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	52	28	68	40	17	17	221
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	35	24	74	38	9	9	189
<b>Total Additional Rental Units Needed Each Year</b>	<b>119</b>	<b>73</b>	<b>200</b>	<b>109</b>	<b>37</b>	<b>37</b>	<b>574</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>417</b>	<b>299</b>	<b>702</b>	<b>511</b>	<b>336</b>	<b>356</b>	<b>2,620</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	26	37	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	135	383	341	28	75	78	N/A

WESTERN SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	20	30	50	45	39	39	224
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	-6	14	31	27	24	24	120
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	-7	6	25	23	22	24	101
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	-46	-20	5	7	11	18	42
<b>Total For-Sale Units Needed Each Year</b>	<b>20</b>	<b>50</b>	<b>111</b>	<b>103</b>	<b>96</b>	<b>106</b>	<b>487</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	8	4	8	5	2	2	29
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	13	5	10	7	4	4	42
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	14	6	12	8	4	4	47
<b>Total Rental Units Needed Each Year</b>	<b>35</b>	<b>15</b>	<b>29</b>	<b>19</b>	<b>10</b>	<b>10</b>	<b>119</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>56</b>	<b>65</b>	<b>140</b>	<b>123</b>	<b>106</b>	<b>116</b>	<b>606</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	0	0	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	71	100	38	26	69	72	N/A

CENTRAL SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	-23	-17	47	33	4	7	92
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	47	29	60	39	18	18	212
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	64	32	67	43	21	21	248
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	62	32	66	41	22	22	244
<b>Total For-Sale Units Needed Each Year</b>	<b>173</b>	<b>92</b>	<b>240</b>	<b>157</b>	<b>65</b>	<b>69</b>	<b>796</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	7	12	36	20	5	5	85
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	13	15	42	23	6	6	104
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	6	13	47	24	2	2	95
<b>Total Rental Units Needed Each Year</b>	<b>26</b>	<b>40</b>	<b>125</b>	<b>68</b>	<b>12</b>	<b>12</b>	<b>283</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>200</b>	<b>132</b>	<b>364</b>	<b>225</b>	<b>77</b>	<b>81</b>	<b>1079</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	26	37	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	47	212	223	1	4	4	N/A

# ADDITIONAL UNITS NEEDED: "LOW" JOB GROWTH SCENARIO

Pricing assumptions: For-sale: 0% down, 6% int; 30-yr fixed; Rental: 30% of income toward housing

QUAD CITIES SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	-34	-11	15	20	21	22	78
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	-3	9	19	16	14	14	71
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	18	17	22	18	16	16	108
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	17	17	22	18	16	16	107
<b>Total For-Sale Units Needed Each Year</b>	<b>34</b>	<b>43</b>	<b>78</b>	<b>72</b>	<b>67</b>	<b>68</b>	<b>363</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	15	4	7	4	3	3	36
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	22	5	8	6	4	4	48
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	13	3	8	4	2	2	31
<b>Total Rental Units Needed Each Year</b>	<b>50</b>	<b>12</b>	<b>23</b>	<b>14</b>	<b>9</b>	<b>9</b>	<b>116</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>84</b>	<b>55</b>	<b>101</b>	<b>86</b>	<b>76</b>	<b>77</b>	<b>479</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	0	0	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	7	29	32	1	2	2	N/A

EAST RANGE SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	-74	-61	-46	-40	-33	-26	0
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	-15	-7	6	9	8	8	31
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	-16	-6	10	10	10	10	39
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	-12	-3	15	10	9	9	43
<b>Total For-Sale Units Needed Each Year</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>28</b>	<b>27</b>	<b>27</b>	<b>114</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	0	1	5	1	1	1	8
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	2	1	6	1	1	1	12
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	1	1	6	1	0	0	9
<b>Total Rental Units Needed Each Year</b>	<b>3</b>	<b>3</b>	<b>17</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>29</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>3</b>	<b>3</b>	<b>48</b>	<b>31</b>	<b>29</b>	<b>29</b>	<b>143</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	0	0	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	8	37	44	0	0	0	N/A

NORTHEAST SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	-20	-10	-5	-2	2	8	10
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	20	13	13	13	13	13	84
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	29	14	15	14	14	14	99
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	22	14	15	14	14	14	93
<b>Total For-Sale Units Needed Each Year</b>	<b>71</b>	<b>40</b>	<b>42</b>	<b>41</b>	<b>43</b>	<b>49</b>	<b>286</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	1	1	1	1	1	1	5
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	3	2	3	3	2	2	15
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	1	1	2	1	1	1	7
<b>Total Rental Units Needed Each Year</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>27</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>75</b>	<b>45</b>	<b>48</b>	<b>46</b>	<b>47</b>	<b>53</b>	<b>313</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	0	0	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	1	4	4	0	1	1	N/A

## ADDITIONAL UNITS NEEDED: "MEDIUM" JOB GROWTH SCENARIO

Pricing assumptions: For-sale: 0% down, 6% int; 30-yr fixed; Rental: 30% of income toward housing

TOTAL STUDY REGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	19	31	122	105	87	80	444
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	66	88	145	111	88	77	574
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	110	98	158	116	94	84	662
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	102	94	140	98	83	79	596
<b>Total Additional For-Sale Units Needed Each Year</b>	<b>298</b>	<b>311</b>	<b>565</b>	<b>430</b>	<b>352</b>	<b>320</b>	<b>2,276</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	32	51	68	36	20	11	218
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	52	62	81	45	26	17	283
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	35	66	92	46	22	9	270
<b>Total Additional Rental Units Needed Each Year</b>	<b>119</b>	<b>179</b>	<b>241</b>	<b>128</b>	<b>68</b>	<b>37</b>	<b>771</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>416</b>	<b>489</b>	<b>806</b>	<b>558</b>	<b>420</b>	<b>357</b>	<b>3,047</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	50	127	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	135	458	494	132	101	82	N/A

WESTERN SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	19	31	51	46	41	39	226
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	-6	14	32	28	25	24	123
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	-7	7	26	24	23	24	106
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	-45	-19	6	8	12	18	44
<b>Total For-Sale Units Needed Each Year</b>	<b>19</b>	<b>53</b>	<b>115</b>	<b>106</b>	<b>102</b>	<b>105</b>	<b>500</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	8	4	8	5	3	2	32
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	13	6	11	7	5	4	45
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	14	6	13	8	5	4	51
<b>Total Rental Units Needed Each Year</b>	<b>35</b>	<b>17</b>	<b>32</b>	<b>21</b>	<b>13</b>	<b>10</b>	<b>128</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>55</b>	<b>69</b>	<b>147</b>	<b>126</b>	<b>115</b>	<b>115</b>	<b>627</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	0	0	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	71	100	49	39	75	75	N/A

CENTRAL SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	-24	-15	53	37	19	7	116
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	47	30	64	42	27	18	229
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	64	34	73	47	31	21	270
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	63	33	72	45	31	22	267
<b>Total For-Sale Units Needed Each Year</b>	<b>175</b>	<b>97</b>	<b>263</b>	<b>171</b>	<b>108</b>	<b>69</b>	<b>883</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	7	13	39	22	11	5	98
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	13	16	45	26	13	6	119
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	6	15	53	28	12	2	115
<b>Total Rental Units Needed Each Year</b>	<b>26</b>	<b>44</b>	<b>137</b>	<b>76</b>	<b>36</b>	<b>12</b>	<b>332</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>201</b>	<b>141</b>	<b>400</b>	<b>247</b>	<b>145</b>	<b>81</b>	<b>1214</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	48	104	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	47	234	290	82	23	4	N/A

# ADDITIONAL UNITS NEEDED: "MEDIUM" JOB GROWTH SCENARIO

Pricing assumptions: For-sale: 0% down, 6% int; 30-yr fixed; Rental: 30% of income toward housing

QUAD CITIES SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	-34	-15	19	22	22	23	86
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	-3	12	20	16	15	14	77
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	17	21	24	19	17	16	115
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	17	21	24	19	17	16	113
<b>Total For-Sale Units Needed Each Year</b>	<b>34</b>	<b>54</b>	<b>86</b>	<b>76</b>	<b>71</b>	<b>69</b>	<b>391</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	15	7	8	5	4	3	41
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	22	8	10	6	5	4	54
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	13	7	9	5	3	2	39
<b>Total Rental Units Needed Each Year</b>	<b>50</b>	<b>22</b>	<b>27</b>	<b>16</b>	<b>11</b>	<b>9</b>	<b>134</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>84</b>	<b>76</b>	<b>113</b>	<b>92</b>	<b>82</b>	<b>78</b>	<b>525</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	0	0	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	7	36	45	8	2	2	N/A

EAST RANGE SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	-75	-34	-39	-35	-29	-21	0
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	-15	18	14	11	8	8	60
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	-16	22	20	13	9	9	73
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	-11	26	24	12	9	8	79
<b>Total For-Sale Units Needed Each Year</b>	<b>0</b>	<b>66</b>	<b>58</b>	<b>36</b>	<b>26</b>	<b>26</b>	<b>212</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	0	25	11	3	1	1	41
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	2	29	13	4	1	1	49
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	1	36	15	4	1	0	57
<b>Total Rental Units Needed Each Year</b>	<b>3</b>	<b>90</b>	<b>39</b>	<b>11</b>	<b>3</b>	<b>2</b>	<b>148</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>3</b>	<b>156</b>	<b>97</b>	<b>46</b>	<b>29</b>	<b>28</b>	<b>359</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	2	23	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	8	83	104	2	1	0	N/A

NORTHEAST SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	-20	-9	-5	-1	4	11	15
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	19	13	14	13	13	13	85
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	28	14	15	14	14	14	99
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	22	14	14	14	14	14	92
<b>Total For-Sale Units Needed Each Year</b>	<b>70</b>	<b>41</b>	<b>43</b>	<b>41</b>	<b>45</b>	<b>51</b>	<b>291</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	1	1	1	1	1	1	6
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	3	3	3	3	2	2	16
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	1	2	2	1	1	1	8
<b>Total Rental Units Needed Each Year</b>	<b>4</b>	<b>6</b>	<b>7</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>30</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>74</b>	<b>47</b>	<b>49</b>	<b>46</b>	<b>49</b>	<b>55</b>	<b>321</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	0	0	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	1	5	6	1	1	1	N/A

# ADDITIONAL UNITS NEEDED: "HIGH" JOB GROWTH SCENARIO

Pricing assumptions: For-sale: 0% down, 6% int; 30-yr fixed; Rental: 30% of income toward housing

TOTAL STUDY REGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	16	25	125	167	306	148	788
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	65	79	143	143	221	106	757
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	108	102	159	151	238	120	878
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	103	90	146	135	220	133	827
<b>Total Additional For-Sale Units Needed Each Year</b>	<b>293</b>	<b>296</b>	<b>574</b>	<b>597</b>	<b>985</b>	<b>507</b>	<b>3,251</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	32	51	70	62	118	40	372
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	52	62	84	75	140	50	461
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	35	66	95	84	169	45	493
<b>Total Additional Rental Units Needed Each Year</b>	<b>119</b>	<b>179</b>	<b>248</b>	<b>220</b>	<b>426</b>	<b>135</b>	<b>1,326</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>411</b>	<b>474</b>	<b>822</b>	<b>817</b>	<b>1412</b>	<b>641</b>	<b>4,578</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	50	154	58	9	24	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	135	470	693	428	309	329	N/A

WESTERN SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	16	25	48	47	46	78	260
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	-10	6	27	26	26	41	126
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	-7	13	25	23	24	48	132
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	-36	-7	9	12	17	55	92
<b>Total For-Sale Units Needed Each Year</b>	<b>16</b>	<b>43</b>	<b>109</b>	<b>107</b>	<b>112</b>	<b>221</b>	<b>610</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	8	4	8	6	5	21	53
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	13	6	11	8	7	26	70
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	14	6	13	9	8	27	78
<b>Total Rental Units Needed Each Year</b>	<b>35</b>	<b>17</b>	<b>32</b>	<b>23</b>	<b>20</b>	<b>74</b>	<b>201</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>52</b>	<b>60</b>	<b>142</b>	<b>131</b>	<b>132</b>	<b>295</b>	<b>811</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	0	0	0	9	24	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	71	100	81	94	225	240	N/A

CENTRAL SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	-24	-14	56	42	27	23	147
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	46	30	66	45	32	26	246
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	64	34	75	49	35	30	287
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	66	34	75	49	36	35	295
<b>Total For-Sale Units Needed Each Year</b>	<b>176</b>	<b>98</b>	<b>272</b>	<b>185</b>	<b>130</b>	<b>114</b>	<b>974</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	7	13	40	24	14	11	110
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	13	16	46	28	17	14	133
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	6	15	54	30	16	10	132
<b>Total Rental Units Needed Each Year</b>	<b>26</b>	<b>44</b>	<b>141</b>	<b>82</b>	<b>47</b>	<b>35</b>	<b>375</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>202</b>	<b>142</b>	<b>413</b>	<b>266</b>	<b>176</b>	<b>150</b>	<b>1350</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	48	107	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	47	234	293	107	59	61	N/A

## ADDITIONAL UNITS NEEDED: "HIGH" JOB GROWTH SCENARIO

Pricing assumptions: For-sale: 0% down, 6% int; 30-yr fixed; Rental: 30% of income toward housing

QUAD CITIES SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	-33	-14	21	27	33	28	109
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	-4	11	21	18	21	17	88
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	17	21	24	20	23	19	124
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	18	21	25	21	23	21	129
<b>Total For-Sale Units Needed Each Year</b>	<b>35</b>	<b>54</b>	<b>91</b>	<b>86</b>	<b>100</b>	<b>84</b>	<b>450</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	15	7	8	6	8	5	49
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	22	8	10	7	9	6	63
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	13	7	10	6	9	5	50
<b>Total Rental Units Needed Each Year</b>	<b>50</b>	<b>22</b>	<b>28</b>	<b>20</b>	<b>27</b>	<b>16</b>	<b>161</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>84</b>	<b>76</b>	<b>118</b>	<b>106</b>	<b>127</b>	<b>100</b>	<b>611</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	0	0	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	7	37	49	21	18	19	N/A

EAST RANGE SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	-75	-34	-39	-35	-27	-21	0
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	-15	18	15	12	11	9	65
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	-16	22	21	14	12	10	78
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	-11	26	25	13	11	9	85
<b>Total For-Sale Units Needed Each Year</b>	<b>0</b>	<b>66</b>	<b>62</b>	<b>38</b>	<b>35</b>	<b>27</b>	<b>228</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	0	25	11	4	3	1	45
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	2	29	13	4	3	1	54
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	1	36	16	5	3	1	62
<b>Total Rental Units Needed Each Year</b>	<b>3</b>	<b>90</b>	<b>41</b>	<b>13</b>	<b>10</b>	<b>3</b>	<b>160</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>3</b>	<b>156</b>	<b>103</b>	<b>51</b>	<b>44</b>	<b>31</b>	<b>388</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	2	25	0	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	8	83	106	7	4	4	N/A

NORTHEAST SUBREGION	2008	2009	2010	2011	2012	2013	6-Year Total
For-Sale Entry-Level: Existing Homes (Unit<\$125,000; Wages<\$15/hr)	-19	-8	-2	52	201	20	273
For-Sale Entry-Level: New Construction (Unit = \$125,000-\$175,000; Wages = \$15-20/hr)	20	13	14	42	131	13	233
For-Sale Move-Up (Unit = \$175,000-\$250,000; Wages = \$20-30/hr)	27	13	14	45	144	14	257
For-Sale Executive (Unit = \$250,000+; Wages >\$30+/hr)	19	9	12	42	132	13	227
<b>Total For-Sale Units Needed Each Year</b>	<b>66</b>	<b>35</b>	<b>40</b>	<b>181</b>	<b>609</b>	<b>60</b>	<b>990</b>
Subsidized Rental: deep subsidy needed (Monthly budget <\$375; Wages <\$7.50/hr)	1	1	1	22	88	1	115
Affordable Rental: shallow subsidy needed (Monthly budget = \$375-625; Wages = \$7.50-\$12/hr)	3	3	3	27	103	3	142
Market Rate Rental: no subsidy needed (Monthly budget = \$625+; Wages >\$12/hr)	1	2	2	33	132	2	171
<b>Total Rental Units Needed Each Year</b>	<b>4</b>	<b>6</b>	<b>7</b>	<b>83</b>	<b>323</b>	<b>6</b>	<b>428</b>
<b>Total Additional Permanent Housing Units Needed Each Year</b>	<b>70</b>	<b>41</b>	<b>47</b>	<b>263</b>	<b>932</b>	<b>65</b>	<b>1418</b>
Peak temporary units needed each year <b>IF</b> accounting for supply of mobile homes, motels, & campgrounds	0	0	23	58	0	0	N/A
Peak temporary units needed each year <b>IF NOT</b> accounting for supply of mobile homes, motels, & campgrounds	1	15	164	199	4	5	N/A