Planning, Research & Evaluation
Memorandum

Need for Workforce Rental Housing in Minnesota

March 2, 2015

Purpose

This memo provides a rough estimate of the need for Workforce Rental Housing Minnesota and should be viewed as an order-of-magnitude estimate, rather than a precise estimate. The estimate includes several assumptions and caveats.

The Estimate

Rental Housing in Communities with Workforce Housing Needs

To address the shortage of rental housing, 77 workforce housing communities in Minnesota need approximately 4,500 to 7,500 additional apartments in properties with 5+ units. To bring the vacancy rate from the current 2.5% to a more desirable 5.0%, about 7,500 additional units are needed. A 5% vacancy rate generally reflects a balanced rental market, while a 2.5% vacancy rate indicates a shortage. Alternatively, these communities would need about 4,500 additional units to reach a 4.0% vacancy rate, which could be considered a minimum to have a more balanced market.

This estimate does not account for three factors. First, it does not address a potential shortage of rental units in properties with 1 to 4 units, including single family homes. We could not find vacancy estimates for these smaller properties. In the 77 workforce housing communities, about 39% of renters are in properties with 1 to 4 units. Second, the estimate does not account for ongoing job and household growth creating a demand for additional rental housing beyond the current shortage. Third, it does not account for units currently under construction but not open for occupancy. These units in the construction pipeline decrease the need for additional units.

Regional Consistency

The need for rental workforce housing is consistent between Greater Minnesota and the Metro communities. We estimate the current rental vacancy rate to be about 2.5% in both regions. In addition, Greater Minnesota has 40% of the state's renter households and had 39% of the statewide job growth that occurred between 2008 and 2013, while the Metro area has 60% of the renter households and had 61% of the job growth.[1]

[1] Minnesota Housing analysis of data from U.S. Census Bureau, *American Community Survey* (2009-13 sample); and Minnesota Housing analysis of data from Minnesota Department of Employment and Economic Development, *Quarterly Census of Employment and Wages* (2008 and 2013).

Workforce Housing Needs Relative to Minnesota Housing's Challenge Program

The vast majority of the workforce-housing needs for rental units fall within the program parameters of Minnesota Housing's Challenge program:

- The recent income limit was $58,000 for much of the state (currently $59,360), with higher thresholds for the Twin Cities and Rochester metro areas.
- The vast majority of jobs and renter household incomes fall within these income limits:
    - In all the workforce housing communities with available data, the median wage for all jobs and the median wage for new hire jobs fall well within these limits.
    - In 55 of the 67 communities with available wage data, between 90% and 98% of new hire jobs had a wage below the Challenge income limit.[2]
    - We also assessed the median annual income for renter households in these communities. Not all workers work full time, many households have more than one wage-earner, and renter households generally have significantly lower incomes than homeowners. In 74 of the 75 communities with available data, the median household income for renters was within the Challenge limit, the exception being the City of Medina. In 60 of the 75 communities, the median income for renter households was more than $25,000 less than the income limit.

See Table 1 at the end of the memo for details on wages and incomes in all 77 communities.

Methodology

Identifying Communities with Workforce Housing Needs

The 77 workforce housing communities are cities or townships with either:

- 2,000 jobs in 2013 and significant job growth between 2008 and 2013 (100 additional jobs in Greater Minnesota or 500 additional jobs in the metro area)[3], or
- Workers commuting long distances into the community for their jobs (more than 15% of the workers traveling over 30 miles).[4] The long commutes may reflect a shortage of housing for the workforce in these communities.

To account for a reasonable commute for workers, we included a commute shed around these 77 cities and townships when defining the overall workforce community – a 10-mile commute shed in Greater Minnesota and a 5-mile shed in the metro area. Maps 1 and 2 at the end of this memo show these communities.

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[2] New hires are employees who are new to a job, while the job itself may or may not be new. Nevertheless, this can be used as a possible proxy for assessing the wages of new jobs.

[3] Minnesota Housing analysis of data from the Minnesota Department of Employment and Economic Development's *Quarterly Census of Employment and Wages* (2008-2013).

[4] Minnesota Housing analysis of data from US Census Bureau, *Longitudinal Employer Household Dynamics Data,* 2011.

Estimating Current Rental Vacancy Rates

Marquette Advisors (a real estate consulting firm based in Minneapolis) produces quarterly estimates of the rental vacancy rate in the metro area. In 2013 and 2014, the rate fluctuated between 2.3% and 2.9%. For this assessment, we assumed a 2.5% rate.[5]

For Greater Minnesota, no one tracks current vacancy rates in individual communities on a regular basis.[6] However, individual communities periodically fund housing studies that include vacancy rate estimates. We reviewed a sample of Greater Minnesota studies conducted between 2012 and 2014 that included vacancy estimates based on surveys of rental properties in those communities.[7] Based on this sample, the average vacancy rate is just over 2.4%. Table 1 shows the distribution of the estimated rates, and Table 2 shows the geographically spread of the communities.

Table 1: Distribution of Estimated Rates

Vacancy Rate	Number of Communities	Share of Communities
<1	3	20.0%
1.0-1.9	4	26.7%
2.0-2.9	3	20.0%
3.0-3.9	4	26.7%
4.0-4.9	0	0.0%
>=5	1	6.7%
Total	15	100.0%

Table 2: Geographical Distribution of Greater Minnesota Communities in the Studies

Region	Number of Communities
Northeast	3
Northwest	2
Southeast	3
Southwest	1
Central	4
West Central	2
Total	15

The 15 communities are: Austin, Beltrami County, Carlton County, Duluth, Grand Rapids, Howard Lake, Jackson, Mankato area, Mille Lacs County, New York Mills, Perham, Pine County, Rochester, Roseau County, and St. Cloud. This assessment has several limitations: (1) it is a limited sample, (2) the studies used different methodologies (e.g. some examining properties with 10+ units and others examining properties with 4+ units),

[5] Marquette Advisors, *Apartment Trends, Twin Cities Metro Area* (Quarter 1 2013 through Quarter 4, 2014).
[6] The U.S. Census Bureau's American Community Survey reports rental vacancy rates annually for communities across the state. However, these rates are not comparable to the standard vacancy rates used by the housing industry and can be misleading. In addition, for individual communities, they reflect rates over a five year period. For example, the current estimates are an average of the rates between 2009 and 2013 and do not reflect current market conditions.
[7] To be included in our review, the survey needed to include at least 3 properties and 50 rental units.

(3) not all of these communities are workforce housing communities, and (4) the communities vary significantly in size. Nevertheless, we found the assessment informative to provide a "ballpark estimate" of the vacancy rate in Greater Minnesota, which we assume to be 2.5%. As mentioned in the introduction of this memo, our intent is to provide an order-of-magnitude estimate of the workforce housing need, not a precise estimate. These studies provided the basis for making a reasonable assumption about the vacancy rate within the workforce housing communities in Greater Minnesota.

Estimating Workforce Housing Need

Each of the 77 communities have an identified workforce housing need based on the criteria that we developed, and we assume in aggregate that they have a vacancy rate of 2.5% in rental properties with 5+ units. (The housing studies did not estimate vacancy rates for smaller properties, which could be a significantly different rental market and have different vacancy rates.)

- There are about 490,000 occupied rental units in these 77 communities (cities/townships and the commute sheds).[8]
- About 61% of these units are in properties with 5+ units.[9]
- Thus, there are about 300,000 occupied units in properties with 5+ units.
- Assuming a vacancy rate of 2.5%, there are about 7,500 vacant units in 5+ unit properties.
- To increase the vacancy rate to 5.0% and create a more balanced rental market, 7,500 additional units are need.
- To increase the vacancy rate to 4.0%, 4,500 new units are needed.

These additional units would just meet the current demand for rental housing in these communities. It would not cover the demand for additional housing to the extent these communities continue to add jobs. Forecasting future jobs and the resulting housing demand in specific communities is speculative and outside the scope of this analysis. As a point of reference, when considering future growth in renter households in these communities, the Minnesota Demographer's Office estimates that Minnesota's overall population will increase by 3.3% between 2015 and 2020.[10] As mentioned earlier, this estimate of workforce housing need does not include rental units currently under construction but not ready for occupancy, which would mitigate the need for additional units.

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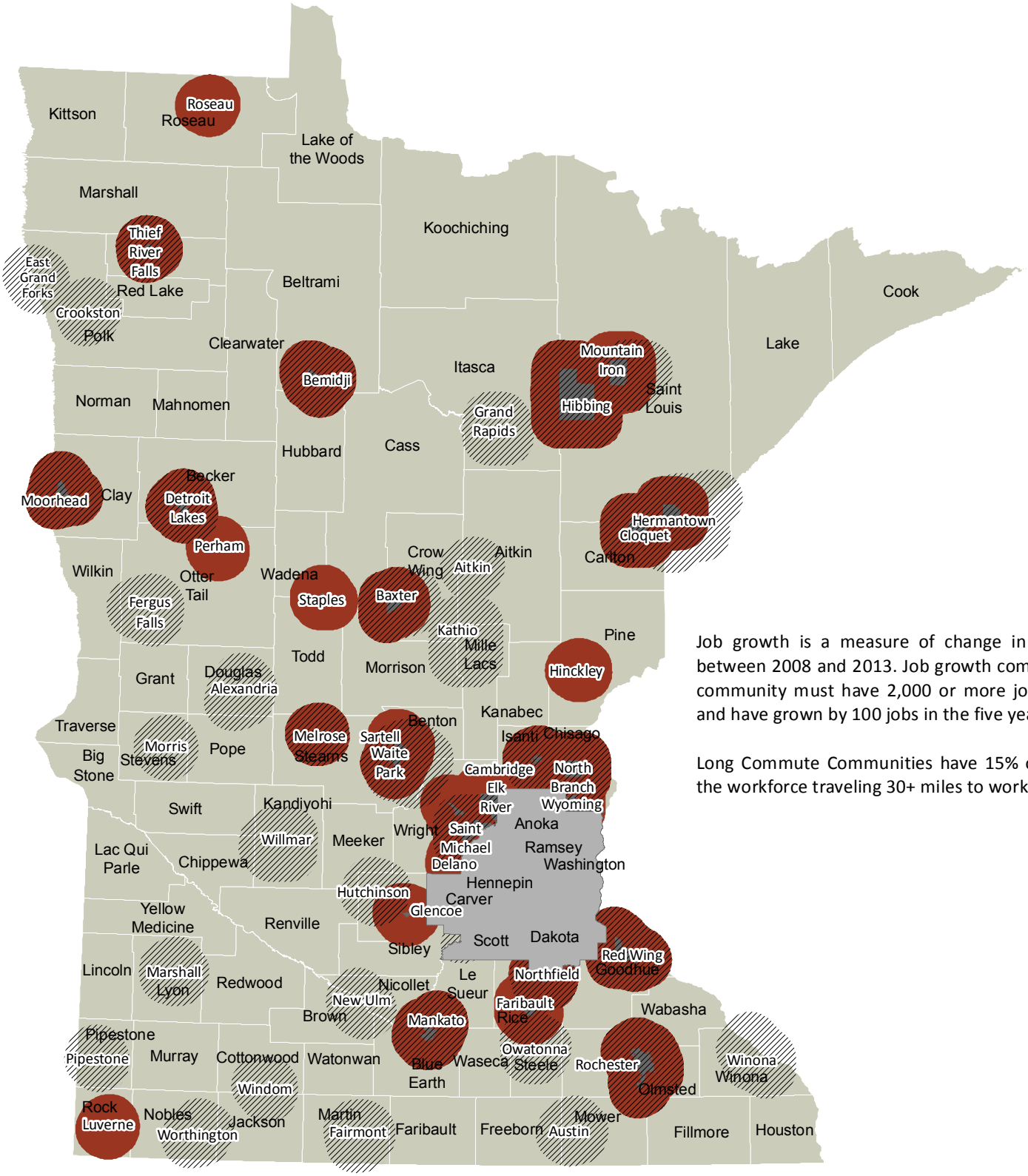
[8] Minnesota Housing analysis of data from U.S. Census Bureau, 2010 Decennial Census.
[9] Minnesota Housing analysis of data from U.S. Census Bureau, American Community Survey, 2009-2013 sample.
[10] Minnesota State Demographic Center, http://mn.gov/admin/demography/data-by-topic/population-data/our-projections/index.jsp. A 3.3% increase in population will result in a 3.3% increase in renter households to the extent that the share of Minnesota households that rent and the average household size do not change.

Greater Minnesota Workforce Housing Communities



Job growth is a measure of change in total jobs between 2008 and 2013. Job growth communities a community must have 2,000 or more jobs in 2013 and have grown by 100 jobs in the five year period.

Long Commute Communities have 15% or more of the workforce traveling 30+ miles to work.

0 20 40 Miles

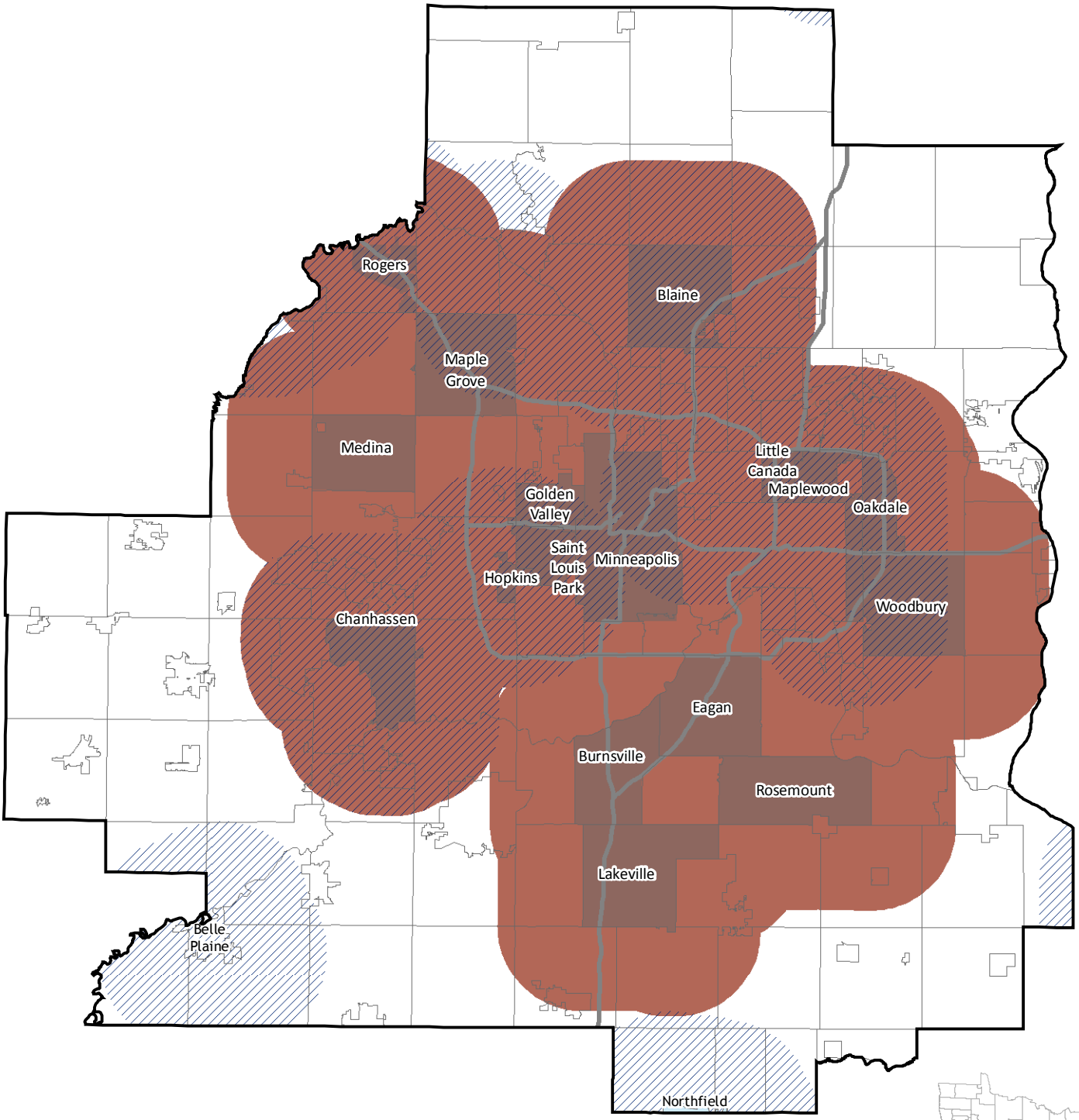
Within 10 Miles of a City with Job Growth >=100 Jobs

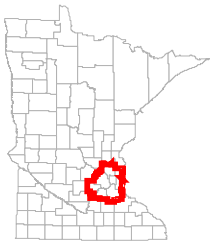
Within 10 Miles of a Long Commute Community

Source: Minnesota Housing analysis of MN Department of Employment and Economic Developments Quarterly Census of Employment and Wages. Date: 02/05/2015

Minnesota Housing Finance Agency

Twin Cities Metro Workforce Housing Communities





Job growth is a measure of change in total jobs between 2008 and 2013. Job growth communities must have 2,000 or more jobs in 2013.

Long Commute Communities have 15% or more of the workforce traveling 30+ miles to work.

Within 5 Miles of a City with Job Growth >=500 Jobs

Within 5 Miles of Long Commute Community

0 4 8 Miles

Minnesota Housing Finance Agency

Source: Minnesota Housing analysis of MN Department of Employment and Economic Developments Quarterly Census of Employment and Wages. Date: 02/23/2015

Table 1: Wage and Income Characteristics of Communities with Workforce Housing Needs

Community	Region [a]	Type [b]	Income Limits for Rental Housing under Challenge	Median Hourly Wage [c]	Annual Income with Median Wage & Full Time	Share of Jobs with Wages within Challenge Limits [c]	Median Hourly Wage of New Hires [c]	Annual Income with Median New Hire Wage & Full Time	Share of New Hire Jobs with Wages within Challenge Limits [c]	Median Renter Household Income [d]	Median Home-owner Household Income [d]
Aitkin	GM	LC	$58,000	$14.00	$29,126	85.6%	$9.66	$20,102	96.1%	$22,305	$46,346
Albertville	GM	JG	$66,400	$14.26	$29,652	87.0%	$9.44	$19,636	96.9%	$49,943	$102,601
Alexandria	GM	LC	$58,000	$14.90	$30,985	83.3%	$10.28	$21,378	95.7%	$22,437	$49,786
Austin	GM	LC	$58,000	NA	NA	NA	NA	NA	NA	$20,557	$55,598
Baxter	GM	JG/LC	$58,000	$13.79	$28,684	83.7%	$9.94	$20,681	92.1%	$40,301	$72,132
Belle Plaine	MA	LC	$66,400	$12.84	$26,708	92.5%	$9.74	$20,266	96.1%	$21,008	$71,056
Bemidji	GM	JG/LC	$58,000	$13.88	$28,879	85.0%	$9.27	$19,291	95.0%	$20,772	$46,567
Blaine	MA	JG/LC	$66,400	$15.60	$32,446	84.1%	$10.03	$20,857	95.1%	$44,881	$79,788
Brainerd	GM	LC	$58,000	$14.48	$30,128	83.2%	$10.24	$21,293	93.1%	$22,577	$45,125
Burnsville	MA	JG	$66,400	$18.46	$38,406	77.5%	$12.05	$25,056	89.8%	$41,349	$80,019
Cambridge	GM	JG/LC	$66,400	$15.69	$32,630	85.2%	$10.79	$22,449	93.7%	$30,207	$55,648
Champlin	MA	LC	$66,400	$13.59	$28,266	86.5%	$10.39	$21,616	94.8%	$40,651	$90,272
Chanhassen	MA	JG/LC	$66,400	$18.12	$37,699	78.0%	$12.38	$25,747	89.9%	$38,294	$116,357
Cloquet	GM	JG/LC	$58,000	NA	NA	NA	NA	NA	NA	$18,095	$57,162
Crookston	GM	LC	$58,000	$16.50	$34,322	86.0%	$11.51	$23,932	95.9%	$24,458	$62,194
Delano	GM	JG	$66,400	$16.66	$34,649	84.7%	$11.09	$23,075	94.3%	$29,901	$91,696
Detroit Lakes	GM	JG/LC	$58,000	$13.14	$27,327	87.6%	$9.60	$19,963	93.5%	$25,966	$56,442
Duluth	GM	LC	$58,000	$17.19	$35,752	73.5%	$10.83	$22,519	88.6%	$20,917	$64,535
Eagan	MA	JG	$66,400	$20.24	$42,091	72.0%	$12.99	$27,016	88.0%	$46,046	$99,869
E. Grand Forks	GM	LC	$58,000	$13.60	$28,283	87.7%	$9.94	$20,680	97.1%	$25,038	$71,652
Elk River	GM	JG	$66,400	$16.30	$33,898	85.5%	$11.29	$23,489	95.0%	$41,019	$85,739
Fairmont	GM	LC	$58,000	$13.76	$28,621	83.1%	$9.17	$19,075	92.5%	$21,014	$60,377
Falcon Heights	MA	LC	$66,400	NA	NA	NA	NA	NA	NA	$35,213	$103,693
Faribault	GM	JG	$58,000	$16.15	$33,602	82.5%	$11.27	$23,435	91.9%	$27,193	$62,271
Fergus Falls	GM	LC	$58,000	$15.10	$31,415	80.4%	$10.40	$21,624	94.9%	$18,345	$61,456
Glencoe	GM	JG	$58,500	$16.19	$33,677	82.1%	$11.34	$23,590	94.9%	$24,750	$65,848
Golden Valley	MA	JG	$66,400	NA	NA	NA	NA	NA	NA	$43,668	$96,518
Goodview	GM	LC	$58,000	$20.87	$43,409	69.5%	$13.50	$28,079	88.9%	$34,074	$62,661
Grand Rapids	GM	LC	$58,000	$15.21	$31,643	78.2%	$10.24	$21,308	89.7%	$22,635	$51,216
Hermantown	GM	JG/LC	$58,000	$11.72	$24,370	88.6%	$9.23	$19,208	96.5%	$35,167	$79,059
Hibbing	GM	JG/LC	$58,000	$15.81	$32,875	75.6%	$10.46	$21,755	91.5%	$18,843	$48,345
Hinckley	GM	JG	$58,000	$11.74	$24,411	93.8%	$9.80	$20,388	98.2%	$17,955	$44,500
Hopkins	MA	JG/LC	$66,400	$13.88	$28,879	85.4%	$12.25	$25,480	93.3%	$37,733	$78,574
Hutchinson	GM	LC	$58,500	$14.54	$30,240	82.6%	$10.75	$22,361	93.6%	$26,714	$62,877
Kathio Twnsp	GM	LC	$58,000	$19.25	$40,036	76.5%	$10.61	$22,067	92.3%	NA	NA
Lakeville	MA	JG	$66,400	$15.97	$33,224	83.7%	$11.16	$23,215	95.3%	$40,521	$102,302
Little Canada	MA	JG	$66,400	$18.99	$39,495	72.8%	$12.02	$25,005	85.6%	$37,807	$65,481
Luverne	GM	JG	$58,000	NA	NA	NA	NA	NA	NA	$21,944	$48,854
Mankato	GM	JG/LC	$58,000	$13.59	$28,266	83.9%	$9.46	$19,670	94.2%	$22,141	$62,009
Maple Grove	MA	JG	$66,400	$16.76	$34,857	79.0%	$11.73	$24,405	92.3%	$46,332	$101,511
Maplewood	MA	JG/LC	$66,400	NA	NA	NA	NA	NA	NA	$32,171	$71,925

Community	Region [a]	Type [b]	Income Limits for Rental Housing under Challenge	Median Hourly Wage [c]	Annual Income with Median Wage & Full Time	Share of Jobs with Wages within Challenge Limits [c]	Median Hourly Wage of New Hires [c]	Annual Income with Median New Hire Wage & Full Time	Share of New Hire Jobs with Wages within Challenge Limits [c]	Median Renter Household Income [d]	Median Home-owner Household Income [d]
Marshall	GM	LC	$58,000	$13.25	$27,560	86.7%	$10.41	$21,663	95.0%	$24,704	$71,890
Medina	MA	JG	$66,400	$20.39	$42,414	73.9%	$11.65	$24,234	87.4%	$90,852	$137,500
Melrose	GM	JG/LC	$58,000	$15.33	$31,893	86.1%	$11.25	$23,395	96.9%	$31,406	$49,688
Minneapolis	MA	JG	$66,400	$22.79	$47,410	67.2%	$14.67	$30,524	82.5%	$30,302	$78,391
Monticello	GM	JG	$66,400	$16.56	$34,442	81.0%	$12.67	$26,363	84.9%	$36,076	$87,841
Moorhead	GM	JG/LC	$58,000	$15.23	$31,679	80.5%	$10.65	$22,158	91.3%	$25,016	$68,218
Morris	GM	LC	$58,000	$16.04	$33,357	82.3%	$10.55	$21,944	94.0%	$17,321	$70,284
Mountain Iron	GM	JG	$58,000	NA	NA	NA	NA	NA	NA	$30,000	$63,819
New Ulm	GM	LC	$58,000	$14.35	$29,842	84.7%	$10.64	$22,122	95.2%	$23,179	$54,015
North Branch	GM	JG/LC	$66,400	$13.37	$27,808	89.8%	$9.72	$20,227	95.6%	$26,138	$70,793
Northfield	GM	JG/LC	$59,100	$18.04	$37,524	75.2%	$10.35	$21,523	91.1%	$25,066	$79,408
Oakdale	MA	JG	$66,400	$17.93	$37,287	77.1%	$11.85	$24,646	88.7%	$32,164	$78,695
Owatonna	GM	LC	$59,100	$14.46	$30,071	85.2%	$10.91	$22,696	95.6%	$27,348	$70,627
Perham	GM	JG	$58,000	NA	NA	NA	NA	NA	NA	$20,100	$60,192
Pipestone	GM	LC	$58,000	$9.80	$20,392	91.1%	$8.26	$17,178	97.8%	$22,783	$53,750
Red Wing	GM	JG/LC	$58,100	$16.13	$33,547	83.1%	$11.22	$23,332	93.2%	$24,208	$68,705
Rochester	GM	JG/LC	$69,100	$20.39	$42,411	73.7%	$10.94	$22,757	92.5%	$32,168	$77,474
Rogers	MA	JG	$66,400	$17.75	$36,923	80.6%	$11.87	$24,690	92.1%	$38,587	$102,959
Roseau	GM	JG	$58,000	$20.10	$41,814	73.9%	$11.95	$24,866	90.7%	$22,500	$60,000
Rosemount	MA	JG	$66,400	NA	NA	NA	NA	NA	NA	$41,563	$94,614
Saint Cloud	GM	LC	$58,000	$16.69	$34,715	76.9%	$11.04	$22,972	90.4%	$24,079	$64,760
St. Louis Park	MA	JG	$66,400	$17.21	$35,805	76.7%	$11.28	$23,473	90.3%	$49,057	$83,852
St. Michael	GM	JG/LC	$66,400	$15.90	$33,070	83.6%	$10.83	$22,518	91.3%	$42,216	$91,985
Sartell	GM	JG	$58,000	$14.50	$30,158	83.1%	$10.29	$21,413	94.6%	$38,490	$91,042
Sauk Rapids	GM	LC	$58,000	$15.60	$32,444	81.0%	$10.58	$22,016	94.1%	$19,967	$73,844
Staples	GM	JG	$58,000	$15.06	$31,323	82.2%	$10.19	$21,188	93.8%	$15,625	$36,397
Thief River Falls	GM	JG/LC	$58,000	$15.70	$32,656	86.4%	$12.20	$25,386	94.3%	$21,418	$52,057
Virginia	GM	LC	$58,000	NA	NA	NA	NA	NA	NA	$16,695	$44,538
Waite Park	GM	JG/LC	$58,000	$12.61	$26,228	88.0%	$9.40	$19,558	95.7%	$34,706	$53,844
Willmar	GM	LC	$58,000	$14.04	$29,202	85.3%	$10.06	$20,924	95.1%	$21,910	$55,052
Willmar Twnsp	GM	LC	$58,000	$14.70	$30,579	90.8%	$11.10	$23,084	96.1%	NA	NA
Windom	GM	LC	$58,000	$13.11	$27,267	93.1%	$9.84	$20,462	98.2%	$16,701	$48,765
Winona	GM	LC	$58,000	$15.25	$31,724	81.6%	$10.02	$20,840	91.0%	$15,527	$56,914
Woodbury	MA	JG	$66,400	$15.99	$33,262	80.2%	$11.83	$24,608	90.0%	$62,711	$106,470
Worthington	GM	LC	$58,000	$13.68	$28,449	85.7%	$10.31	$21,434	93.2%	$27,308	$54,853
Wyoming	GM	JG	$66,400	$19.31	$40,167	75.2%	$14.77	$30,722	86.4%	$31,645	$80,044

NOTES:
NA = Not Available
a. GM = Greater Minnesota and MA = Metro Area
b. JG= Job Growth Areas, LC = Long Commute Area, and JG/LC = Both Job Growth and Long Commute Area
c. Minnesota Department of Employment and Economic Development analysis of wage data from 2013
d. Minnesota Housing analysis of data from the *U.S. Census Bureau's American Community Survey* (2009-13 sample)