

Appendix A: Metro area rankings

One common way to measure disparities is to take the absolute difference between two measures. While simple to compute and easy to understand, the absolute difference misses a crucial aspect of disparities. To see why, consider the following example (Figure A.1). In Area A, white, non-Latino people have a per capita income of \$100,000, and people of color have a per capita income of \$90,000. In Area B, white, non-Latino people have a per capita income of \$11,000, and people of color have a per capita income of \$11,000. In Area B, white, non-Latino people have a per capita income of \$11,000, and people of color have a per capita income of \$11,000. Intuition suggests that the disparity is bigger in Area B (where the average white person has 11 times as much income as an average person of color) than in Area A (where both groups have a lot of money). But the absolute difference is insensitive to this. The relative difference better reflects our intuition that the disparity is more extreme in Area B—an income of \$100,000 instead of \$90,000 allows one to buy a slightly nicer home while an income of \$11,000 instead of \$1,000 allows one to eat.

A.1 An example of absolute versus relative disparity

	White, non- Latino	People of color (POC)	Absolute disparity (subtract)	Relative disparity (divide)
Area A	\$100,000	\$90,000	\$10,000	1.1
Area B	\$11,000	\$1,000	\$10,000	11

This is an extreme example, but it points to the importance of measuring *relative* disparities (ratios) rather than *absolute* disparities (differences). For percentages and rates, an alteration is necessary. Consider two ways of looking at the same data:

$Disparity_{W:POC} = PovRate_W/PovRate_{POC}$

$Disparity_{POC:W} = PovRate_{POC}/PovRate_{W}$

The underlying data are exactly the same; only the baseline has changed. In the first measure we are examining the relative disparity using people of color as the baseline, and in the second measure we are examining the relative disparity using white, non-Latino people as the baseline. When comparing the resulting measures to other areas, an area's ranking can change depending on which baseline we use. Converting the percentages or rates to odds, then taking the ratio of the odds, eliminates this problem:

 $Odds Ratio = \frac{PovRate_W / (1 - PovRate_W)}{PovRate_{POC} / (1 - PovRate_{POC})}$

The ranking of an area's odds ratio will not change even if the baseline changes. The tables on the following pages provide the measures of disparities for the United States and its 25 most populous metropolitan areas, along with the ranking of each metropolitan area. For ease of interpretation, all ratios and odds ratios compare whites to people of color (i.e., all measures use people of color as the baseline). Higher odds ratios and higher rankings indicate larger disparities.

A.2 Residents 25+ with a high school diploma or equivalent

	White, non- Latino	People of color (POC)	Odds ratio (White / POC)	Rank of odds ratio (1=largest)
United States	91.5%	75.7%	3.5	NA
Atlanta-Sandy Springs-Marietta, GA	91.5%	83.4%	2.1	23
Baltimore-Towson, MD	92.6%	83.8%	2.4	21
Boston-Cambridge-Quincy, MA-NH	94.3%	78.3%	4.6	14
Chicago-Joliet-Naperville, IL-IN-WI	94.1%	76.1%	5.0	11
Dallas-Fort Worth-Arlington, TX	93.8%	71.7%	6.0	7
Denver-Aurora-Broomfield, CO	96.2%	74.2%	8.9	1
Detroit-Warren-Livonia, MI	90.4%	83.0%	1.9	24
Houston-Sugar Land-Baytown, TX	93.6%	71.2%	5.9	8
Los Angeles-Long Beach-Santa Ana, CA	94.7%	70.0%	7.6	2
Miami-Fort Lauderdale-Pompano Beach, FL	93.8%	79.0%	4.0	16
Minneapolis-St. Paul-Bloomington, MN-WI	96.3%	78.3%	7.3	3
New York-Northern New Jersey-Long Island, NY- NJ-PA	93.3%	76.0%	4.4	15
Orlando-Kissimmee-Sanford, FL	92.3%	81.5%	2.7	19
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	92.8%	81.0%	3.0	18
Phoenix-Mesa-Glendale, AZ	94.1%	71.5%	6.4	6
Pittsburgh, PA	92.5%	89.0%	1.5	25
Portland-Vancouver-Hillsboro, OR-WA	94.7%	78.4%	4.9	12
Riverside-San Bernardino-Ontario, CA	92.0%	68.7%	5.2	10
St. Louis, MO-IL	92.0%	81.9%	2.5	20
San Antonio-New Braunfels, TX	94.8%	76.0%	5.7	9
San Diego-Carlsbad-San Marcos, CA	95.2%	75.4%	6.5	5
San Francisco-Oakland-Fremont, CA	96.6%	80.4%	6.9	4
Seattle-Tacoma-Bellevue, WA	95.2%	83.2%	4.0	16
Tampa-St. Petersburg-Clearwater, FL	91.2%	80.9%	2.4	21
Washington-Arlington-Alexandria, DC-VA-MD-WV	96.2%	83.9%	4.8	13

A.3 Percentage of individuals with income at or above poverty threshold

	White, non- Latino	People of color (POC)	Odds ratio (White / POC)	Rank of odds ratio (1=largest)
United States	89.0%	75.7%	2.6	NA
Atlanta-Sandy Springs-Marietta, GA	90.7%	76.0%	3.1	13
Baltimore-Towson, MD	93.8%	81.2%	3.5	8
Boston-Cambridge-Quincy, MA-NH	92.9%	79.1%	3.4	9
Chicago-Joliet-Naperville, IL-IN-WI	92.7%	76.9%	3.8	4
Dallas-Fort Worth-Arlington, TX	92.3%	78.0%	3.4	9
Denver-Aurora-Broomfield, CO	92.5%	77.3%	3.6	6
Detroit-Warren-Livonia, MI	89.0%	69.1%	3.6	6
Houston-Sugar Land-Baytown, TX	92.8%	77.7%	3.7	5
Los Angeles-Long Beach-Santa Ana, CA	90.4%	78.8%	2.5	20
Miami-Fort Lauderdale-Pompano Beach, FL	90.4%	78.5%	2.6	17
Minneapolis-St. Paul-Bloomington, MN-WI	93.6%	74.3%	5.0	1
New York-Northern New Jersey-Long Island, NY- NJ-PA	92.1%	78.9%	3.1	13
Orlando-Kissimmee-Sanford, FL	88.9%	76.9%	2.4	21
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	92.6%	75.8%	4.0	3
Phoenix-Mesa-Glendale, AZ	89.9%	72.5%	3.4	9
Pittsburgh, PA	90.1%	72.8%	3.4	9
Portland-Vancouver-Hillsboro, OR-WA	88.6%	77.9%	2.2	23
Riverside-San Bernardino-Ontario, CA	87.9%	77.1%	2.2	23
St. Louis, MO-IL	90.9%	70.2%	4.2	2
San Antonio-New Braunfels, TX	91.5%	78.0%	3.0	15
San Diego-Carlsbad-San Marcos, CA	88.4%	81.9%	1.7	25
San Francisco-Oakland-Fremont, CA	92.7%	84.8%	2.3	22
Seattle-Tacoma-Bellevue, WA	91.7%	81.3%	2.6	17
Tampa-St. Petersburg-Clearwater, FL	88.3%	74.4%	2.6	17
Washington-Arlington-Alexandria, DC-VA-MD-WV	95.4%	88.2%	2.8	16

A.4 Percentage of civilian working-age population that is employed

	White, non- Latino	People of color (POC)	Odds ratio (White / POC)	Rank of odds ratio (1=largest)
United States	69.6%	61.5%	1.4	NA
Atlanta-Sandy Springs-Marietta, GA	69.7%	62.8%	1.4	10
Baltimore-Towson, MD	74.5%	63.8%	1.7	6
Boston-Cambridge-Quincy, MA-NH	75.0%	65.1%	1.6	8
Chicago-Joliet-Naperville, IL-IN-WI	73.6%	61.6%	1.7	6
Dallas-Fort Worth-Arlington, TX	72.6%	67.4%	1.3	16
Denver-Aurora-Broomfield, CO	75.8%	67.3%	1.5	9
Detroit-Warren-Livonia, MI	68.7%	53.1%	1.9	4
Houston-Sugar Land-Baytown, TX	69.8%	65.7%	1.2	20
Los Angeles-Long Beach-Santa Ana, CA	69.1%	63.3%	1.3	16
Miami-Fort Lauderdale-Pompano Beach, FL	69.1%	65.3%	1.2	20
Minneapolis-St. Paul-Bloomington, MN-WI	79.4%	64.8%	2.1	1
New York-Northern New Jersey-Long Island, NY- NJ-PA	71.4%	63.4%	1.4	10
Orlando-Kissimmee-Sanford, FL	69.0%	63.8%	1.3	16
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	71.7%	57.7%	1.9	4
Phoenix-Mesa-Glendale, AZ	69.6%	61.4%	1.4	10
Pittsburgh, PA	71.9%	56.7%	2.0	2
Portland-Vancouver-Hillsboro, OR-WA	69.6%	65.3%	1.2	20
Riverside-San Bernardino-Ontario, CA	61.3%	56.4%	1.2	20
St. Louis, MO-IL	73.2%	57.8%	2.0	2
San Antonio-New Braunfels, TX	70.3%	65.7%	1.2	20
San Diego-Carlsbad-San Marcos, CA	67.8%	62.8%	1.3	16
San Francisco-Oakland-Fremont, CA	73.6%	66.4%	1.4	10
Seattle-Tacoma-Bellevue, WA	72.8%	66.2%	1.4	10
Tampa-St. Petersburg-Clearwater, FL	66.3%	62.0%	1.2	20
Washington-Arlington-Alexandria, DC-VA-MD-WV	77.7%	71.8%	1.4	10

A.5 Per capita income (2012 dollars)

	White, non- Latino	People of color (POC)	Ratio (White / POC)	Rank of ratio (1=largest)
United States	\$32,498	\$18,563	1.8	NA
Atlanta-Sandy Springs-Marietta, GA	\$36,047	\$19,246	1.9	12
Baltimore-Towson, MD	\$41,061	\$23,840	1.7	21
Boston-Cambridge-Quincy, MA-NH	\$43,153	\$22,776	1.9	12
Chicago-Joliet-Naperville, IL-IN-WI	\$39,279	\$19,205	2.0	10
Dallas-Fort Worth-Arlington, TX	\$38,838	\$18,146	2.1	4
Denver-Aurora-Broomfield, CO	\$40,269	\$18,517	2.2	3
Detroit-Warren-Livonia, MI	\$31,290	\$18,439	1.7	21
Houston-Sugar Land-Baytown, TX	\$43,058	\$18,899	2.3	2
Los Angeles-Long Beach-Santa Ana, CA	\$46,538	\$19,679	2.4	1
Miami-Fort Lauderdale-Pompano Beach, FL	\$39,850	\$19,085	2.1	4
Minneapolis-St. Paul-Bloomington, MN-WI	\$37,943	\$18,078	2.1	4
New York-Northern New Jersey-Long Island, NY- NJ-PA	\$47,275	\$22,797	2.1	4
Orlando-Kissimmee-Sanford, FL	\$30,644	\$16,443	1.9	12
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	\$37,870	\$19,886	1.9	12
Phoenix-Mesa-Glendale, AZ	\$33,168	\$15,927	2.1	4
Pittsburgh, PA	\$30,711	\$20,260	1.5	25
Portland-Vancouver-Hillsboro, OR-WA	\$32,568	\$19,349	1.7	21
Riverside-San Bernardino-Ontario, CA	\$30,544	\$15,707	1.9	12
St. Louis, MO-IL	\$31,966	\$17,533	1.8	19
San Antonio-New Braunfels, TX	\$35,884	\$18,344	2.0	10
San Diego-Carlsbad-San Marcos, CA	\$39,299	\$20,210	1.9	12
San Francisco-Oakland-Fremont, CA	\$57,832	\$28,172	2.1	4
Seattle-Tacoma-Bellevue, WA	\$39,405	\$24,182	1.6	24
Tampa-St. Petersburg-Clearwater, FL	\$30,816	\$17,529	1.8	19
Washington-Arlington-Alexandria, DC-VA-MD-WV	\$55,949	\$30,056	1.9	12

A.6 Percentage of householders who own their homes

	White, non- Latino	People of color (POC)	Odds ratio (White / POC)	Rank of odds ratio (1=largest)
United States	71.5%	46.5%	2.9	
Atlanta-Sandy Springs-Marietta, GA	76.0%	48.9%	3.3	9
Baltimore-Towson, MD	76.5%	47.5%	3.6	7
Boston-Cambridge-Quincy, MA-NH	68.5%	34.7%	4.1	4
Chicago-Joliet-Naperville, IL-IN-WI	75.5%	47.8%	3.4	8
Dallas-Fort Worth-Arlington, TX	68.8%	47.2%	2.5	17
Denver-Aurora-Broomfield, CO	68.4%	45.9%	2.6	12
Detroit-Warren-Livonia, MI	77.9%	47.9%	3.8	6
Houston-Sugar Land-Baytown, TX	73.1%	51.1%	2.6	12
Los Angeles-Long Beach-Santa Ana, CA	58.7%	41.2%	2.0	23
Miami-Fort Lauderdale-Pompano Beach, FL	74.3%	52.8%	2.6	12
Minneapolis-St. Paul-Bloomington, MN-WI	75.8%	37.0%	5.3	1
New York-Northern New Jersey-Long Island, NY- NJ-PA	66.7%	33.4%	4.0	5
Orlando-Kissimmee-Sanford, FL	70.6%	48.1%	2.6	12
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	75.9%	49.4%	3.2	10
Phoenix-Mesa-Glendale, AZ	68.8%	46.0%	2.6	12
Pittsburgh, PA	73.3%	39.6%	4.2	3
Portland-Vancouver-Hillsboro, OR-WA	64.1%	43.7%	2.3	18
Riverside-San Bernardino-Ontario, CA	71.1%	54.4%	2.1	21
St. Louis, MO-IL	77.3%	43.9%	4.3	2
San Antonio-New Braunfels, TX	71.0%	56.0%	1.9	24
San Diego-Carlsbad-San Marcos, CA	60.5%	42.6%	2.1	21
San Francisco-Oakland-Fremont, CA	59.8%	45.8%	1.8	25
Seattle-Tacoma-Bellevue, WA	64.7%	45.1%	2.2	20
Tampa-St. Petersburg-Clearwater, FL	70.7%	47.2%	2.7	11
Washington-Arlington-Alexandria, DC-VA-MD-WV	71.6%	52.7%	2.3	18

Appendix B: Estimating the impact of eliminating disparities

According to the Metropolitan Council's Preliminary Regional Forecast to 2040, the Twin Cities region in 2040 will have approximately:

- 2,187,000 white, non-Latino residents, of whom 989,000 will be householders
- 1,487,000 residents of color, of whom 587,000 will be householders

Using these forecasts, we estimated the number and rates of people in poverty, employed people, people with a high school diploma, and homeowning households, along with total and per capita personal income. We examined two scenarios:

- 1. Current disparities are unchanged in 2040; and
- 2. All Twin Cities region residents have the same socioeconomic profile in 2040 as white, non-Latino residents do today.

For example, during the 2007-2011 time period, 76.96% of white, non-Latino householders and 40.02% of householders of color owned their homes. Applying the forecasts to those numbers:

	Race of householder	Number of householders	Home- ownership rate	Number of homeowning householders	Total homeowning householders
Scenario A: Disparities	White, non- Latino householders	1,005,000	X 76.96%	= 773,000	975,000
maintained	Householders of color	504,000	X 40.02%	= 202,000	
Scenario B: Disparities	White, non- Latino householders	1,005,000	X 76.96%	= 773,000	1,161,000
elminated	Householders of color	504,000	X 76.96%	= 388,000	
Difference betweer	+186,000				

B.1 Projecting disparity scenarios, homeownership example

Appendix C: Calculating segregation indices

Segregation describes the distribution of different racial and ethnic groups in a region across certain subregional geographic units (typically census tracts). Consider this hypothetical region with only three census tracts and two broad racial and ethnic groups:

	White, non- Latino	People of color (POC)	Total population
Tract 1	95	5	100
Tract 2	20	30	50
Tract 3	25	25	50
Region	140	60	200

C.1 Example used for calculating segregation indices

In this report, we use three indices of segregation that are perhaps the best-known. The dissimilarity, exposure, and isolation indices of segregation are all calculated by using the following variables:

- W_t , or the number of white, non-Latino people in tract t
- W_R , or the number of white, non-Latino people in the region
- POC_t, or the number of people of color in tract t
- POC_R , or the number of people of color in the region
- P_t , or the total number of people in tract t

In the hypothetical region displayed in Figure C.1 above, W_R would be 140, POC_R would be 60, and the other three quantities would vary by the tract. For example, in tract 1, W_t would be 95, POC_t would be 5, and P_t would be 100.

Calculating the three segregation indices involves using these five variables to calculate, for each tract, the result of a formula. Each segregation index has a different formula. Summing those tract-level results yields the measure of segregation.

Dissimilarity Index

The formula for the dissimilarity index is:

$$D = \sum_{k=1}^{T} 0.5 \times \left| \frac{W_t}{W_R} - \frac{POC_t}{POC_R} \right|$$

That is, we calculate the formula $\frac{W_t}{W_R} - \frac{POC_t}{POC_R}$ for each tract, take the absolute value and multiply by 0.5, and sum the results across all tracts.

C.2 Example of calculating dissimilarity index

			Calculating Dissimilarity Index			
	White, non- Latino	People of color (POC)	Total population	$rac{W_t}{W_R}$	$\frac{POC_t}{POC_R}$	$0.5 \times \left \frac{W_t}{W_R} - \frac{POC_t}{POC_R} \right $
Tract 1	95	5	100	.68	.08	.30
Tract 2	20	30	50	.14	.50	.18
Tract 3	25	25	50	.18	.42	.12
Region	140	60	200			.60

The minimum possible value (complete integration) is 0, in which case each tract has the same racial composition as the region does. The maximum possible value (complete segregation) is 1, in which case each tract contains people from only one group. In this case, the value is 0.60, indicating that segregation is relatively high. Although Tracts 2 and 3 have a fairly even distribution of of white non-Latinos and people of color, only half the region's residents live in those tracts.

Exposure Index

The dissimilarity index yields the same result whether it is calculated from the perspective of whites or from the perspective of people of color. The exposure index, however, does not. For this reason, the exposure index provides a better picture of the local context as experienced by the average member of a particular racial or ethnic group.

The formula for calculating the exposure of whites to people of color is:

$$E_{W:POC} = \sum_{k=1}^{T} \frac{W_t}{W_R} \times \frac{POC_t}{P_t}$$

As above, we calculate the formula $\frac{W_t}{W_R} \times \frac{POC_t}{P_t}$ for each tract, then sum the results across all tracts:

C.3 Example of calculating exposure of white, non-Latinos to people of color

		Calculating Exposure Index – White, non- Latino to people of color				
	White, non- Latino	People of color (POC)	Total population	$rac{W_t}{W_R}$	$\frac{POC_t}{P_t}$	$\frac{W_t}{W_R} \times \frac{POC_t}{P_t}$
Tract 1	95	5	100	.68	.05	.03
Tract 2	20	30	50	.14	.60	.09
Tract 3	25	25	50	.18	.50	.09
Region	140	60	200			.21

The result is often interpreted as the proportion of people of color in the tract of an average white, non-Latino person. In this case, the tract of an average white, non-Latino person contains 21% people of color. Although Tract 2 is 60% people of color and Tract 3 is 50% people of color, comparatively few white people live in those tracts.

To obtain the exposure of people of color to whites, reverse the symbols in the formula:

$$E_{POC:W} = \sum_{t=1}^{T} \frac{POC_t}{POC_R} \times \frac{W_t}{P_t}$$

C.4 Example of calculating exposure of people of color to white, non-Latinos

		Calculating	g Exposure In to White, no	dex – People of color n-Latinos		
	White, non- Latino	People of color (POC)	Total population	$\frac{POC_t}{POC_R}$	$\frac{W_t}{P_t}$	$\frac{POC_t}{POC_R} \times \frac{W_t}{P_t}$
Tract 1	95	5	100	.08	.95	.08
Tract 2	20	30	50	.50	.40	.20
Tract 3	25	25	50	.42	.50	.21
Region	140	60	200			.49

The tract of an average person of color contains 49% white people. Although Tract 1 is 95% white people, comparatively few people of color live in that tract.

The exposure index has a minimum value of zero (in which case no members of one group live in a tract with any member of the other group) and a maximum value of the proportion of the "exposure to" group in the region. Since white people are 70% of the region's population (140 / 200 = 0.7), the maximum value for the exposure of people of color to whites would be 0.7.

Isolation Index

The isolation index is a special case of the exposure index: the exposure of a group to itself. So the isolation of white people is given by:

$$I = \sum_{k=1}^{T} \frac{W_t}{W_R} \times \frac{W_t}{P_t}$$

C.5 Example of calculating isolation index

		Calculating Isolation Index – Exposure of a group to itself				
	White, non- Latino	People of color (POC)	Total population	$rac{W_t}{W_R}$	$\frac{W_t}{P_t}$	$\frac{W_t}{W_R} \times \frac{W_t}{P_t}$
Tract 1	95	5	100	.68	.95	.64
Tract 2	20	30	50	.14	.40	.06
Tract 3	25	25	50	.18	.50	.09
Region	140	60	200			.79

In this case, the tract of a typical white person contains 79% white people.

Appendix D: Comparing predicted and actual numbers of householders of color

HUD provides a way of calculating how many households of color a city or township would contain if households were distributed across the region according to their income, but not according to their race. The mathematical formula is below (*i* indexes income brackets):

$$PredictedHouseholdsOfColor = \sum_{i=1}^{l} \frac{RegionHouseholdsOfColor_{i}}{RegionTotalHouseholds_{i}} \times CityTotalHouseholds_{i}$$

The idea is to calculate, for each income bracket, the proportion of all the region's households in that bracket who are people of color, then multiply this ratio by the number of households in that income bracket in the city or township. Summing up the results across all income brackets yields the city's number of households of color that would be predicted if each income bracket contained exactly the same proportion of households of color as the region did. Thus this method produces the households of color a city or township would contain, given its income distribution, if the households from each income bracket were distributed evenly across cities and townships with respect to race and ethnicity.

For example, in the lowest income bracket (less than \$50,000), 50% (500,000 /1,000,000) of households in the region are households of color. In the hypothetical city or township, there are 10,000 households in this income bracket. Therefore, if households were distributed evenly across the region with respect to race, this city or township would have 5,000 (50% of 10,000) households of color in this income bracket. Performing the same calculation for the other income brackets, and summing the results, yields 19,167 predicted households of color for this hypothetical city or township. Dividing the actual number of households of color are overrepresented given the income distribution of the city or township, while values much lower than 1.0 mean that households of color are overrepresented given the income distribution of the city or township, while values much lower than 1.0 mean that households of color are underrepresented given the income distribution of the city or township.

Household income bracket	Households of color in region (by household income)	Divide	Total households (by household income)	Multiply	Total households (by household income) in city or township	Predicted number of households of color
< \$50,000	500,000	÷	1,000,000	Х	10,000	5,000
\$50K-\$99,999	200,000	÷	600,000	Х	20,000	6,667
\$100K or more	100,000	÷	400,000	Х	30,000	7,500
Sum						19,617

D.1 Example of calculating predicted number of households of color based on income

The predicted number of households of color for all 186 cities and townships in the Twin Cities region were calculated using 2007-2011 American Community Survey data. Rather than the three coarse income brackets given in the hypothetical example above, all 16 income brackets available in the ACS data were used to take advantage of finer-grained distinctions across income brackets:

- Less than \$10,000
- \$10,000 to \$14,999
- \$15,000 to \$19,999
- \$20,000 to \$24,999
- \$25,000 to \$29,999
- \$30,000 to \$34,999
- \$35,000 to \$39,999
- \$40,000 to \$44,999
- \$45,000 to \$49,999
- \$50,000 to \$59,999
- \$60,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$124,999
- \$125,000 to \$149,999
- \$150,000 to \$199,999
- \$200,000 or more

The following table provides the numbers for the cities and townships in the Twin Cities region.

D.2 Actual and predicted numbers of households of color for communities in Twin Cities region

City or Township	Total households	Households of color (actual)	Households of color (predicted based on income)	Ratio (Actual / Predicted)
Afton city	1,114	62	159	0.39
Andover city	9,651	358	1,325	0.27
Anoka city	7,119	463	1,394	0.33
Apple Valley city	19,040	2,550	2,904	0.88
Arden Hills city	3,304	253	515	0.49
Bayport city	1,293	41	229	0.18
Baytown township	620	7	81	0.09
Belle Plaine city	2,354	34	382	0.09
Belle Plaine township	332	6	53	0.11
Benton township	282	0	41	0.00
Bethel city	195	4	43	0.09
Birchwood Village city	395	1	67	0.01

	Total	Households of color	Households of color (predicted	Ratio (Actual /
City or Township Blaine city	households 20,656	(actual) 2,386	based on income) 3,257	Predicted) 0.73
Blakeley township	151	3	24	0.12
Bloomington city	35,736	5,594	6,234	0.90
Brooklyn Center city	10,603	4,434	2,110	2.10
Brooklyn Park city	25,500	10,029	4,515	2.22
Burnsville city	24,476	4,479	4,156	1.08
Camden township	319	0	48	0.00
Carver city	1,011	155	127	1.22
Castle Rock township	485	19	73	0.26
Cedar Lake township	899	20	118	0.17
Centerville city	1,228	24	176	0.14
Champlin city	8,537	511	1,272	0.40
Chanhassen city	8,222	507	1,071	0.47
Chaska city	8,896	1,034	1,433	0.72
Circle Pines city	1,930	76	305	0.25
Coates city	54	4	9	0.47
Cologne city	547	38	89	0.43
Columbia Heights city	7,648	1,651	1,469	1.12
Columbus city	1,503	19	228	0.08
Coon Rapids city	23,578	2,156	4,042	0.53
Corcoran city	1,812	153	255	0.60
Cottage Grove city	11,566	1,414	1,697	0.83
Credit River township	1,527	65	182	0.36
Crystal city	9,015	1,483	1,597	0.93
Dahlgren township	510	10	73	0.14
Dayton city	1,611	149	254	0.59
Deephaven city	1,359	7	158	0.04
Dellwood city	378	2	45	0.04
Denmark township	622	28	80	0.35
Douglas township	285	5	43	0.12
Eagan city	25,340	3,595	3,801	0.95
East Bethel city	4,111	124	628	0.20
Eden Prairie city	22,954	3,708	3,219	1.15
Edina city	20,586	2,002	3,184	0.63
Elko New Market city	1,201	37	158	0.23
Empire township	729	50	101	0.50
Eureka township	529	0	75	0.00
Excelsior city	1,069	73	188	0.39
Falcon Heights city	2,061	374	381	0.98

City or Township	Total households	Households of color (actual)	Households of color (predicted based on income)	Ratio (Actual / Predicted)
Farmington city	6,890	635	1,012	0.63
Forest Lake city	7,095	364	1,193	0.31
Fort Snelling UT	97	65	25	2.59
Fridley city	11,577	2,311	2,163	1.07
Gem Lake city	122	8	21	0.38
Golden Valley city	8,695	999	1,363	0.73
Grant city	1,395	17	180	0.09
Greenfield city	930	24	126	0.19
Greenvale township	302	0	44	0.00
Greenwood city	293	11	34	0.33
Grey Cloud Island township	123	3	19	0.16
Hamburg city	243	23	46	0.50
Ham Lake city	5,227	207	721	0.29
Hampton city	273	0	47	0.00
Hampton township	307	9	45	0.20
Hancock township	134	7	20	0.35
Hanover city	203	0	26	0.00
Hastings city	8,454	221	1,466	0.15
Helena township	581	7	77	0.09
Hilltop city	354	80	91	0.88
Hollywood township	432	5	66	0.08
Hopkins city	7,989	2,184	1,522	1.44
Hugo city	4,776	261	706	0.37
Independence city	1,208	0	154	0.00
Inver Grove Heights city	13,354	1,838	2,172	0.85
Jackson township	468	91	79	1.15
Jordan city	1,799	155	302	0.51
Lake Elmo city	2,887	124	396	0.31
Lakeland city	680	2	99	0.02
Lakeland Shores city	128	9	19	0.46
Lake St. Croix Beach city	468	14	78	0.18
Laketown township	673	0	90	0.00
Lakeville city	18,344	1,384	2,540	0.54
Landfall city	316	89	75	1.18
Lauderdale city	1,125	272	229	1.19
Lexington city	806	52	153	0.34
Lilydale city	446	26	63	0.41
Lino Lakes city	6,066	299	812	0.37
Linwood township	1,987	2	330	0.01

City or Township	Total households	Households of color (actual)	Households of color (predicted based on income)	Ratio (Actual / Predicted)
Little Canada city	4,374	696	838	0.83
Long Lake city	754	36	120	0.30
Loretto city	277	17	49	0.35
Louisville township	385	11	53	0.21
Mahtomedi city	2,720	65	397	0.16
Maple Grove city	22,316	2,091	3,012	0.69
Maple Plain city	754	60	136	0.44
Maplewood city	14,651	2,472	2,627	0.94
Marine on St. Croix city	276	2	36	0.06
Marshan township	413	0	66	0.00
May township	1,127	10	151	0.07
Mayer city	475	11	71	0.15
Medicine Lake city	206	19	31	0.62
Medina city	1,613	31	201	0.15
Mendota city	72	2	15	0.14
Mendota Heights city	4,459	322	623	0.52
Miesville city	58	0	11	0.00
Minneapolis city	168,273	49,630	34,301	1.45
Minnetonka city	21,591	1,716	3,240	0.53
Minnetonka Beach city	251	3	31	0.10
Minnetrista city	2,101	80	282	0.28
Mound city	3,941	258	665	0.39
Mounds View city	4,698	668	809	0.83
New Brighton city	9,249	1,355	1,683	0.81
New Germany city	185	10	34	0.29
New Hope city	8,491	1,621	1,623	1.00
New Market township	1,166	10	158	0.06
Newport city	1,441	72	280	0.26
New Prague city	1,700	42	322	0.13
New Trier city	37	0	5	0.00
Nininger township	398	5	70	0.07
Northfield city	342	19	50	0.38
North Oaks city	1,686	134	204	0.66
North St. Paul city	4,485	791	824	0.96
Norwood Young America city	1,423	70	252	0.28
Nowthen city	1,382	23	194	0.12
Oakdale city	10,704	1,485	1,824	0.81
Oak Grove city	2,617	155	386	0.40
Oak Park Heights city	1,927	144	390	0.37

City or Township	Total households	Households of color (actual)	Households of color (predicted based on income)	Ratio (Actual / Predicted)
Orono city	2,994	173	379	0.46
Osseo city	1,171	91	238	0.38
Pine Springs city	127	3	16	0.19
Plymouth city	27,879	3,473	4,149	0.84
Prior Lake city	8,318	605	1,210	0.50
Ramsey city	7,974	525	1,140	0.46
Randolph city	148	0	22	0.00
Randolph township	231	3	32	0.09
Ravenna township	799	0	104	0.00
Richfield city	14,816	4,089	2,841	1.44
Robbinsdale city	6,176	1,070	1,136	0.94
Rockford city	137	22	29	0.77
Rogers city	3,480	170	483	0.35
Rosemount city	7,334	756	1,074	0.70
Roseville city	14,770	1,998	2,659	0.75
St. Anthony city	3,758	328	678	0.48
St. Bonifacius city	842	47	128	0.37
St. Francis city	2,562	28	432	0.06
St. Lawrence township	135	0	19	0.00
St. Louis Park city	21,357	2,883	3,669	0.79
St. Marys Point city	159	3	27	0.11
St. Paul city	111,882	36,089	22,950	1.57
St. Paul Park city	2,032	211	359	0.59
Sand Creek township	509	2	74	0.03
San Francisco township	271	0	38	0.00
Savage city	8,897	1,205	1,213	0.99
Scandia city	1,457	31	217	0.14
Sciota township	118	2	18	0.11
Shakopee city	12,848	2,296	1,979	1.16
Shoreview city	10,641	858	1,624	0.53
Shorewood city	2,610	195	327	0.60
South St. Paul city	8,290	1,019	1,534	0.66
Spring Lake township	1,323	40	179	0.22
Spring Lake Park city	2,790	351	522	0.67
Spring Park city	805	15	161	0.09
Stillwater city	6,904	369	1,144	0.32
Stillwater township	871	14	113	0.12
Sunfish Lake city	211	14	24	0.58
Tonka Bay city	607	11	83	0.13

City or Township	Total households	Households of color (actual)	Households of color (predicted based on income)	Ratio (Actual / Predicted)
Vadnais Heights city	5,135	559	798	0.70
Vermillion city	160	0	25	0.00
Vermillion township	393	9	59	0.15
Victoria city	2,332	29	284	0.10
Waconia city	3,874	154	617	0.25
Waconia township	468	0	69	0.00
Waterford township	211	0	36	0.00
Watertown city	1,673	92	299	0.31
Watertown township	467	3	73	0.04
Wayzata city	1,734	134	299	0.45
West Lakeland township	1,202	58	140	0.42
West St. Paul city	8,737	1,791	1,705	1.05
White Bear township	4,299	153	618	0.25
White Bear Lake city	10,368	524	1,859	0.28
Willernie city	215	17	38	0.44
Woodbury city	22,277	3,158	3,070	1.03
Woodland city	174	4	22	0.18

Appendix E: Roundtable discussions

Metropolitan Council staff and partners held roundtable discussions with Section 8 voucher holders in Fall 2012 and Fall 2013. The process and results of each outreach effort is detailed below.

Roundtable discussions conducted by The Access Group (TAG) – Fall 2012

The Access Group (TAG), as an original member of the FHEA Steering Committee (later called the Advisory Committee) proposed outreach to Metropolitan Council's HRA Voucher Household members as a way to allow underrepresented individuals a voice in planning for the region.

The Metropolitan Council, which has the largest HRA in the state, administers the most comprehensive Section 8 voucher program. The families and individuals served by this program represent a critical contingent of the region's low-income communities. Participants in the Section 8 program offer many insights into how low-income residents choose residences given their limited resources. The Council's outreach efforts intended to capture these insights through a number of roundtable discussions.

Methodology

Figure E.1 summarizes the location of each discussion as well as attendence. TAG intentionally chose meeting spaces that were familiar to and comfortable for the invitees. The invitations, which were extended by the Metro HRA, offered \$25 Target gift cards to the first 25 respondents.

E.1 Locations and attendance of Fall 2012 roundtable discussions

Communities of residence	ommunities of residence Location of meeting	
Eden Prairie/Minnetonka/Edina	HRA Housing Service Center	65
Anoka/Blaine/New Hope	Anoka County Human Service Center	36
Ramsey County/Saint Paul/Roseville	Metropolitan Council (Robert street)	20
	Total number of participants	121

TAG organized and facilitated three FHEA Indicator/Dot-mocracy meetings with Section 8 voucher holders, to elicit feedback to four questions:

- 1. What would prompt you to stay in your community?
- 2. What is missing from your community?
- 3. What would prompt you to move?
- 4. What do you like about your community?

TAG also asked attendees to fill out a demographic survey soliciting information related to their race, housing status, and income. Those surveys were voluntary and many of the attendees opted not to fill them out. Head counts for each gathering are included in this narrative for a more accurate assessment of attendance.

The responses are tabulated using the exact words from the respondents in the attached FHEA Focus Group graphs. This narrative is intended to give a flavor of the gatherings and to offer a sense of the conversations that accompanied the dot-mocracy indicator process.

Eden Prairie/Minnetonka/Edina

The Eden Prairie gathering, hosted and supported by the Eden Prairie Housing and Community Services Department, was an energy packed session with 65 participants in attendance. The appetite for and perceived importance of the conversation is highlighted by the fact that although everyone knew only 25 attendees would receive a gift card in exchange for their participation, every person stayed and fully engaged for two and a half hours. The Somali community of Eden Prairie was the majority of the attendees with significant participation of African American individuals, the small contingent of white people in attendance were, in comparison to other groups, markedly older.

The conversation was lively and vigorous. Many participants were passionate about what they loved about the community (good schools, parks, amenities) and equally passionate about the need for better access to jobs, more Section 8 workers in their community, and addressing perceived racial and cultural tensions in the area. They felt strongly that attending to the issues that they listed as missing from their communities be a part of the regional plans and that their voices be included in that process. Lack of elected leadership and community leadership of color was discussed by many in the group while others expressed trust in their elected local leadership.

A volunteer translator became part of the process and helped some attendees participate more fully. The amount of time needed to translate both questions and responses began to noticeably irritate several of the "English speaking" attendees. At one point a Somali woman talked about the need for cultural understanding among her neighbors. The response from two elderly white women and an African American woman was to suggest that the Somali community needed to "learn English" and be willing to "act like the rest of us" and "have respect for the American culture." This comment was clearly felt as an attack against the Somali community and several people decided to leave in response. TAG convinced them to remain and discuss the comment. The exchange and ensuing discussion was both tense and important. In the end, it was decided to include both comments on the dot-mocracy flip chart.

Anoka/Blaine/New Hope

There were 36 people in attendance for the Anoka gathering. The majority of people in attendance were white with a significant contingent of African Americans and several newly immigrated African and Middle Eastern individuals. Approximately 20% of the participants self-reported as living with a mental health problem and/or mental disability. In addition, several of the participants were physically disabled.

The discussions were lively and engaging. Many people expressed a sense of isolation from the main stream, stating that they were not able to find and keep a living wage job and to navigate support systems they knew were there. Again, the desire to have an HRA Section 8 worker located in their community was clearly articulated. Like the Eden Prairie participants, Anoka participants voiced real hope that their voices would continue to be solicited for the ongoing policy conversations.

Ramsey County/Saint Paul/Roseville

There were approximately 20 people participating in the Ramsey County gathering held at Metropolitan Council. The group was racially diverse and included several people with physical disabilities. A significant

amount of conversation centered on the need for landlord training, especially around disability rights, but other issues were raised as well.

Common themes from all discussions

- At each gathering, people were asked if they were interested in continuing to inform policymakers as the Fair Housing and Equity Assessment and the THRIVE 2040 processes evolved. In each instance, there was robust interest and many expressed their hope that their voices and experiences would inform regional policy discussions Participants voiced a real desire to expand and deepen their participation from one outreach gathering to consistent, regular discussions.
- At the same time, they voiced concerns about lack of familiarity with the processes and "rules" around public testimony and public discussions. Similarly, all three groups expressed an interest and lack of knowledge around the Metropolitan Council's obligations and roles. They understood that the Council ran a Section 8 program and were responsible for the bus system, but had virtually no knowledge of the Council's regional planning functions or its purview over parks, housing, and wastewater management.
- All three groups spontaneously suggested that this document, a final report of community indicators, be shared with them in some form of second community gathering.

Participant demographics

Of the 121 attendees, 59 completed voluntary surveys that asked for information. Anoka/Blaine/New Hope group had the highest response rate (75%), followed by Ramsey County/Saint Paul/Roseville (65%), and the Eden Prairie/Minnetonka/Edina group (29%).

The average age of all participants completing the survey (N=59) was age 49; the youngest participant was 25 and the oldest 86. Half (50%) of the participants indicated they had children under age 18 living at home with them. All participants reported an annual income of less than \$40,000—half (50%) reported income of \$10,000 or less.

Figures E.2, E.3, and E.4 provide additional information about participants' race, housing tenure, and mode of transportation.

E.2 Race of Fall 2012 roundtable participants

	(N=57)
White/Caucasian	44%
Black/African American	32%
Asian	2%
Somali	14%
Multi-racial	4%
A race not listed above	4%

E.3 Housing tenure of Fall 2012 roundtable participants

	(N=58)
Apartment	64%
Condo or townhome	21%
Single family dwelling	12%
Other housing	3%

E.4 Typical weekly transportation use of Fall 2012 roundtable participants

	(N=59)
Own car	51%
Transit	27%
Car owned by someone else	19%
Walk	17%
Taxi	10%
Bike	5%
Other	8%

Responses not mutually exclusive and add up to more than 100%

Roundtable discussions conducted by FullThought – Fall 2013

Methodology

An invitation was mailed to 3,000 Section 8 voucher holders living within the service jurisdictions of each of the following HRA/PHA agencies:

- Minneapolis
- Saint Paul
- Northwest metro
- Suburban Ramsey County
- Southwest metro
- Anoka County

Figure E.5 summarizes the meeting locations and attendance of each of the six discussions. The invitation indicated that the first 25 persons to register and attend would receive a \$25 Target gift card and that refreshments/light meal would be served. The invitation included a request for interpreter services. Three roundtables were scheduled during the daytime over the lunch hour and 3 were scheduled for early evening.

E.5 Locations and attendance of Fall 2013 roundtable discussions

	Number registered	Number of attendees
Minneapolis Urban League	33	28
Metropolitan Council (Robert street)	51	28
Anoka Human Service Center	24	16
Northwest Family Service Center	46	22
Metropolitan Council (Robert street)	35	18
Eden Prairie Shopping Center	30	41
	153	

The invitation letter indicated that the Metropolitan Council HRA was hosting discussions about community opportunities as it explored ways to measure varying types of opportunity within communities. The participants were invited to provide input to the Council's planning process and to elaborate on the specific types of opportunities that mattered to them when selecting place of residence. Attendees were asked to complete a short survey to collect various pieces of background information including income; age; place of residence; means of transportation; number of children in the household; race; and housing structure type. Large maps, including one which showed the opportunity clusters, were printed and posted at each discussion. Participants were asked to react to the maps at various points in the discussion.

The following tables provide verbatim quotes by meeting location.

E.6 Why did you decide to live where you live?

Discussion location	Comments
Anoka Human Service Center	 I made my decision 25 years ago when I moved from 100 miles away (more rural area of Minnesota). I had a Section 8 voucher. Every one said my son would get killed moving here (closer to cities). But I chose an area I thought was safe, and where I had friends and knew people. I live on the third floor and I feel safe. The cleanliness and diversity of where I live now (near Blaine), and the amenities and cost, are big draws for me. I work in Blaine and tried to move even closer, but cleanliness, safety and having choice (i.e., housing options outside of senior housing) are main reasons I live where I do. Transportation is also an issue here, in White Bear Lake (where she used to live) there is hardly any transportation, people rely on each other for rides and favors because they can't get around. (I chose a place) where it is quiet and there is not a lot of crime. Peaceful. I moved to be closer to my job and place of worship, and it's quieter. I was in transitional housing (prior to moving here) and from there I was able to make that decision. Access to grocery stores is good. Moving away from busy streets. But affordability is what's driving us to move from our home to an apartment. They (Section 8) recently changed the payments (and participant cannot afford to stay). Quiet, near bus stop. Years ago (important factors were) nature and access to smaller businesses and smaller buildings, so I could get a first floor apartment. Space is important—I didn't want to feel claustrophobic. Luckly I was grandfathered into where I live now (otherwise could not afford it). The parks, the quiet, and accessible via transit (are amenities she enjoys). Metro Mobility service is an issue though – the schedule, hours, where they go. There is too much segregation when it comes to age and transit services or housing (many services for seniors but not midel-aged people with disabilities). Disability is an equalizer. I wanted to tay in Anoka county because of the (social
Northwest Family Service Center	 I went with whomever accepted the Section 8 (voucher). I see [sic: find out] who accepts HRA (Section 8) but I (also) want to know about the crime rate, who my neighbors are going to be, how the schools are, how far the bus line is, do they clean up the neighborhood, where social services are. You need to know how far that is (amenities and services). If your car breaks down you're going to need to take the bus. How far is it (bus line)? I looked for a quiet, safe neighborhood and a landlord who is responsive to solving problems. How much apartment complex (and residents) interact with community, like national night out events. I didn't have a lot of time to move out of my place. No one told me that Section 8 was no longer

going to be accepted so I had less than 30 days (to move). I didn't get a chance to look around; I had to take what was available at the time. I (would) like to take my car and ask neighbors about the neighborhood and crime, but you can't do if there is no management between property managers and Section 8 (staff). (Her current building is) not what I wanted. There are too many police there. *Facilitator: Would you have made different choice with more time?* Yes, I would have chosen another area. I (would have gone) in the morning and evening to check it out. My sister, who lives with me, wants a quiet (place to live).

- I relocated from Michigan. I visited a few times and I like the area. I knew I'd be leaving my car so it was important to know what was being offered in the area. (This is) my first time living in an apartment. I am glad I chose where I did. *Facilitator: What was available?* The bus line—I had to learn that; the library and services. I learned my way around. It was a new adventure.
- (White respondent) I can repeat safety. I chose a city where I would be safer.
- Safety. I was impressed with how quickly the Brooklyn Park Police Department responds to calls.
- (White respondent) I would try to make the grocery store and a corner store was close by.
- (White respondent) For me, it was going where I knew people. I have family and friends close by.
- I left transitional housing and I really didn't have a preference. Just that there was school, a good school in the area. I didn't have time to figure it out. I am just going to school and I don't use a car.
- My decision was to be around family. I had to live in St. Paul for a year but my daughter lives here (Brooklyn Park). I have a lot of health problems so by being close to her, it's easier for her to get to me in case of an emergency.
- I would say access to freeways. To get to my job it only takes me 10 minutes now. I'm a single parent and I need to get home to my son quickly. I don't need a 45 commute. I guess the availability of jobs too. If there were no jobs here, I couldn't be here either.
- (White respondent) I chose my apartment because it was a senior living, meaning no children, and because of safety. It's a nice, quiet location and the unit is well taken care of.
- (White respondent) I've been in the same place for 19 years. The area has changed over the years, but I'm close to grocery stores, clinics, and the bus line, should something happen to my vehicle. If I have to walk, I can still get there. That, for me, is a big thing. I don't want to take a 2-hour bus ride or think about it. Where I am going, is there even a bus running? That's why I stay where I am.
- I was limited because of the age of my children because I have an 18 year old daughter that changed some of my benefits. Then it made a choice for housing (because she could not afford the same unit with a decrease in the benefit amount).
- The time limit that we're allowed to move, especially if you have kids or if you're older. Nowadays, you have to be careful. If we had more time to look it would help us. Time is factor; you panic.

 Metropolitan Council Education for son/a good school system Where I'm at is because is there is a grocery store and drug store. I have limited mobility. And it's near the bus line. I agree; convenience. Convenience. Education and community. It is a diverse place. (Somali participant) Safety is important. A good community to raise children. A neighborhood without violence, and one that has values— where people want to get an education and not stand on the corner. In Brooklyn Park, I have a church nearby, my child's school, and a fire station. It's a good environment for the kids. It's safe for children. The police come around and talk to children, the church is involved with them. Community organization. (<i>Facilitator: What does that mean?</i>) A community that tries to improve itself. There is communication with residents and people build relationships. We can ask each other questions. People in neighborhood that are friendly.
There is a neighborhood watch where I live.

	 There is a drop-off center for the children. Affordable day care and day care for children with disabilities. A place that is truly affordable. Parks and cosmetics of neighborhood. The amenities it offers; its appearance. Landlords who are honest and maintain the apartments. Avoiding slumlords. In Roseville, there were weeds up to my head and mice all over the place. Where I am now, they maintain the property; no quick fixes. I look at structure. How quiet it is; the crime; if it's well-lit.
Eden Prairie Shopping Center	 My friends are in north Minneapolis. It is easy for them to get to me. I also wanted to live in a senior place. It is hard to find a senior place that takes Section 8. I also wanted to live downtown Chaska where it is close to my church and my mom's house. I had to go to the only place that would rent to me. I had no choice. The place I wanted was five dollars over my rent limit. Now I am in a place where I can't use my electric wheel chair. The people are great. The last place was a slum. I have lived in Edina for sixteen years. I have the best landlord in the world. Landlord made it possible for me to move to the first floor where it was more accessible. I am raising my grandson and am retired. There are good schools by me. It was possible for me to take my scooter to my grocery store. I love where I am at. I had 1,200 square feet where I used to live. And now I live in a garage. But I want to stay in Chaska. I chose my area because of low crime and location for being close to the school and other family owned businesses. I live in Minnetonka near the high school. Very community-oriented. I live in Brooklyn Center. It is a nice neighborhood. Not that many kids, which I like as a senior. I live in Brooklyn Center. It is close to my job. Previously I did not have a job. I didn't have a car. I was using a bicycle in Edina. There are many opportunities to work in Edina. Very good job availability by bus, bike, or foot. Employment is more important. Out in Waconia. Lost ability to drive and really needed social services. I loved it out there in Waconia; very low crime. It was lovely by the lake. I wanted to feel safe in the cities. I had no idea where to go and wanted a senior building where it was on hold all day trying to find any place to live. I needed an updated housing list. I made a lot of phone calls and was on hold all day trying to find any place to live. I needed an updated housing list. I made a to know where Sect
Metropolitan Council (Robert Street)	 The building looked good. The list in St. Paul was not very long. There are more buses in Saint Paul. If a similar house was in Brooklyn Park, I would not choose it. I did not choose. That is where my voucher was. I live in Macalester-Groveland. People throw out really good stuff. I did not choose. That is where my voucher was. I wanted to move back to the city. I was in another city and wanted to move back. Saint Paul is my home. Transportation is good. Neighborhood is good. They don't repair Section 8 units so people move on. Privacy is important. Stores and restaurants are convenient. Convenient location. Short walk to the bus. I want to get out of the community I am in but I like Saint Paul. I live in Saint Paul but I chose to move to White Bear. Quieter; more stores; less crime. Transportation. A lot of stores and restaurants. Sun Ray. Landlord willing to fix stuff. I did not choose where I live. I am thinking of moving out of the city but the transportation is good. I wish the neighborhoods were better.But it is hard to find a place where they take the voucher.
Minneapolis Urban	Good bus service, close to my job.Where my son goes to school and safety.

League	 Good neighbors. People look out for one another.
	 Amenities, affordable, you know a nice place with a dishwasher.
	Neighborhood.
	Close to bus stops.
	I don't have any preference for cities or suburbs.
	 Access and a mixed-use area. There are theaters, shops. The city is more attractive.
	Family and relatives.
	 Neighborhood. I have lived here for 5 years. I used to move every two years or so. I have stayed here because the neighbors stick together and we expect that people who move into our block are clean and respectful. People work together. I also want access to buses (Camden area). Buslines. There is diversity in my apartment building. We have a slum lord. We have had roaches. I am on a campaign to get the landlord to respond but the tenants have a responsibility too. My main concern is decent sanitary housing. Inspectors to take more responsibility. Landlords falsify reports. We have had a mold problem. Metro Council should address bed bugs. We need to address those livability problems. My landlord will intimidate the tenants who may have disadvantages. "Samir" is our landlord. Don't rent from him.
	 I used to live in New Hope. Buses were bad. I moved back to the North Side because of schools and bus access. I can't do the suburbs. Suburbs don't understand kids of color. Lots of cultural biases still exist. I have a 20 year-old. If my son is sitting outside my house, I don't want the cops to be stopping over. You guys get it (The crowd agrees). Culturally, the schools in the suburbs don't know our kids. Children of color are misunderstood. Suburbs don't have 4-5 bedroom units. Cities do. Transportation, relatives, cheap housing—that's what I consider.

E.7 [Facilitator presents maps and explains opportunity clusters and the types of data that went into the analysis]. This is how the Metropolitan Council looks at planning. Does that make sense to you? Is there anything surprising?

Discussion location	Comments
Anoka Human Service Center	Not asked
Northwest Family Service Center	 I wish they had a chart or map that also had the average income on it because that would look just like that (referring to Opportunity Cluster map). I lived in Eden Prairie, but they stopped taking Section 8. The schools were better. I could tell you where the blue is (referring to blue cluster) – that's Minnetonka, Cottage Grove. (In the green area) there are lower incomes and more people in the inner cities. There are more services there because poor folks have more problems. There is lower crime in the suburbs but there is crime—drugs, meth labs—things you don't see. (Another participant agrees and adds) In a manicured neighborhood its more 'hidden' crime. (Another adds) Right. And nice areas don't attract police as much. I think it (Access to Opportunities map) makes sense. I wasn't really surprised. The further you go out the more they have (in terms of social services). I moved from St. Paul to Hopkins. There are things in Hopkins that people in St. Paul aren't aware of because you have to be (that citie's) resident. They want to cap certain areas to keep you there and not spill over to other areas.

• I just feel the choice is made for us, being program recipients. It alienates us so bad. We are

	 pushed into certain areas, and that's where we have to be. I don't know what the answer is, but I wish we could find one. In Lakeville, there was a better education system. I didn't have the worries of my son wearing the right color. Just piece of mind for a black male, and the mother of a black male. (<i>Facilitator: So safety for your son, from gang areas/activity, that is a key issue for you?</i>) It all boils down to that. I didn't and don't have a choice—being black, getting rental assistance. Allow families to have more choice. There is a stigma with home owners. Some of them don't even know about Section 8 or how to accept it and some don't want to. A lot of property owners don't know about the program. If they do and they have one bad experience, they don't want to do it again. If Metro HRA could get the word out to property owners about it, people won't have to be clustered into one area. They don't want to enter it (Section 8 program) because it guarantees the rent, and if they want you out. Sometimes they don't want to have to maintain the property the right way, if there is damage. We know Section 8 have a stigma but that's not the point. They run your 'application' or whatever and if there is something on your record—whether you have good kids or bad, whether you can pay the rent paid in full or not—they are not going accept you. If there is something on the record they're not going to take you. I had to pay \$30 per application, I had to put down an additional deposit, and sign a paper. I had the hardest time getting this apartment in Hopkins. I have a totally clean record and have lived years in each unit. It's getting harder. When we first had it 20 years ago, we didn't have this problems. It's harder now, more stigmatized. I have had it for 19 years. It has changed so much. I was in my building for 5 years; then it didn't pass the inspectors, city, and my contact at Metro HRA. I had to find another place to stay. The rules, lack of coordi
	 look at it. Access to hospitals and pharmacies, clinics. And urgent care or minute clinics. If you don't have a unbials and urgent to us t
Metropolitan Council (Robert Street)	 vehicle and you don't want to go to (on a long transit ride to doctor). How up to date is this information? There are a lot of jobs opening in the north Hennepin County area (part of blue area on the map). We just sold property and there are new jobs and housing. With that, crime is going up a little but people look out of for you. They have some subsidized housing out there. I am glad about the improvements but I was sad to lose my family's land. If you're willing to move out there you have to have a car pretty much. But there are buses and the Big Lake rail line. That is good transportation and you can go a far distance but it costs the same as the bus. I'm in a blue area and it's hard for transportation. Jobs are very limited. So it makes sense to me.
	 Yes and no. As far as jobs it's not high access. I'm in a green area.
	I'm in a yellow and transportation is limited.
	• (Participant in a yellow area). It's pretty decent where I stay at, I don't have complaints. I walk right out my building and there is the bus, restaurants, and stores. It's right there.
	 Its 10 miles away to get to Rainbow (grocery store). My bus service runs only every 45 minutes. You have to have a bike or a car. After 8pm at night, you're stranded. I live in St. Louis Park. (The map) doesn't tell the story. (St. Louis Park is in a yellow area, indicating moderate access to services, jobs and transit).
	 I get up at 5am to get my bus to my volunteer work. But I do have access to stores, churches, etc. where I live.
	I live in Maplewood; there are things around there.

Eden Prairie	 I do drive but if I didn't, you'd have to have a bike or something. They do have transit but it depends on who you are. If you're older and couldn't walk, it would be hard. It would make sense except it doesn't make sense. I have no church, or parks (nearby). The bus service is limited, and there is none on Sundays. I have to walk far or take three buses or go into a downtown area. I live at Larpenteur and Snelling (Roseville). They kept cutting off the bus service. It doesn't feel like green (cluster), it's like blue. The bus service stops running at a certain time (lives in Maplewood near East Side of St. Paul). It has a high crime rate. In Roseville, there is access to everything. I don't agree with higher crime rate or school performance. The pollutants and jobs I do agree with. I have to rely on Metro Mobility or friends.
Shopping Center	
Metropolitan Council (Robert Street)	 I don't have the faintest idea. I pretty much agree with what you're saying. There is more crime in town. I choose to live downtown because I don't drive. It pretty much sucks for my son. There needs to be a good grocery store, Dollar Tree. Not Lund's. I can't afford to shop at Lund's. Even Walgreen's a rip off. Something like Dollar Tree. We're here because of transportation. I'm on the bus. This is the only place I can live. How come you cannot expand these services to the blue cluster? Maybe we can spread out a little. I need the bus to carry my groceries. If you expand the transportation, then we can avoid congestion too. Schools are overcrowded. Expand transportation. Expand schools. Expand the services. All services need to be spread out. Grocery store. Whenever I want to go, I have to call my friend. She lives in downtown Minneapolis. I agree with everything said. I've lived there 13 years. I have mold in my house. I'd rather live out in the blue and white. I don't like living in Saint Paul. It does not feel safe. Maybe if there were more transportation for people who aren't younger or older. You cannot get on Metro Mobility if you are not mentally ill or disabled. That to me is discrimination. I always think about it and wonder why do they build houses for poor next to the railroad tracks and pollutants? If they put us in an environment not safe and we get sick, we are behind everything. Other places, you don't have transportation. I lived in Brooklyn Park. If you have a car, it's not bad for suburbs, but they shut down. Buses go out there but not a frequent. The train is coming. Now I live in Midway. I have grocery stores and I like the convenience of buses, stores etc. I have everything. I'm near everything. My neighborhood is quiet. My concern is Metro Transit buses. I have arthritis. I am disabled. Insurance company don't cover everything. It don't leave much to imagination. When people don't hire you because you are ol

	 You need more buses out in the yellow clusters. Safety in the buses is not good. Brakes too hard; people in wheel chairs tip off etc.
Minneapolis Urban League	 There is crime everywhere, not just the cities. The reason the crime rates are so high is because so many predators live here. They are concentrated in the central cities. In the suburbs, they throw them out. Sexual predators, how can they get vouchers? Felons should not be able to get Section 8. I went through a process to get mine. I don't know how predators can get vouchers. I have been here 12 years. I walk everywhere. When we show respect to each other, we get respect. Suburbs can have jobs but the transportation is bad. Not enough shopping areas. Crime is everywhere. I am happy where I live. It's the pollution we get from people coming here for the jobs. Where are our jobs? Those statistics were there. Where does the money go? I live in Plymouth. Suburbs—I can live with my neighbor but do they want to live with me? The money leaves this community. And the people from the suburbs come here to buy drugs on Friday and Saturdays. (People nod in agreement) The data reinforces how I see the suburbs. I would like to live there. The map doesn't show that suburbs doesn't accept Section 8. I am motivated by transit, schools, and clinics. My daughter across the street has a mold problem. She has children, one has asthma. It's more "kept quiet" out in the suburbs. Does not feel welcoming. Where are the Sec. 8 housing? Classism, only certain areas accept Section 8. It does not show who accepts vouchers. In St. Paul—only the East Side takes them. I lived there for 5 years. In Minneapolis, it's the North Side. Racism and classism are not addressed on these maps. I have been on the North Side for 3 years. Not enough affordable housing. Crime rates too high. People who want to stay on the North Side but they can't afford it.

E.8 If certain factors compete with each other when selecting housing, such as access to decent jobs versus a good school, how is that handled? What trumps other things for you?

Discussion location	Comments
Anoka Human Service Center	 I'm disabled so transportation is the initial thing. Where I'm moving to it will be hard; no bus line without long walk. But also has to be affordable and a lot of places don't take Section 8. One landlord I called actually criticized me for asking about Section 8. I use a therapy dog and the place I am moving to is okay with that. Moving is going to impact my kids who live with me. My primary would be security and comfort . I work part-time and I'm on SSI but I pay a lot for my medical care. I have to be careful about my expenses, including transportation. Transportation is the most important. If you don't have a car, its how you get around. I've had to call Metro Transit for special assistance. Transportation trumps. Mine was a job. I was offered a better position. I didn't want to (work that far from home), but it was better for me. Before, it was schools and safety but now that my kids are grown it's changed. I have to have space, and peace and quiet. Of course, it has to be affordable too. I am grateful to have a garage, especially in the winter. So basically, those are my mental and physical considerations. I go to school here. I have a job here. I took the bus for 10 years because it took that long to get a

	 driver's license. It was 1.5 hours on the bus. As soon as something became available, you had to move on it right way. (To find Section 8 housing) there are so many phone calls and limited options. The safety is a huge thing, especially if you have kids. Safety. My kids have moved since then. But for me now, I am attending school and I wanted to attend a good school that is safe.
Northwest Family Service Center	 Safety and community involvement. Safety and access to medical care. I came to Brooklyn Center over 20 years ago. Since then I raised a son who has been harassed by the local police. He's not a bad kid, just in the wrong place wrong time. That (harassment) should be addressed. (Another participant agrees) They're (Brooklyn Center police) so prejudiced against low income people. (Another participant disagrees) If I hear or see something I don't like, I call 911. You have to work with them (police). Avoiding violence. We can't pick. We don't have enough time. Section 8 knew I had to move before I did. I lived in a community for 5 years and then I had to move. I have to pay for applications and that's costly when moving. You have to rush. Each state mush have different rules. I was shocked to learn you couldn't just move (or stay) where you wanted to. Quiet/safety and transportation. If only one? Safety would win. A safe place for kids to be with things for them to do. Affordability. We want to move somewhere else but the rent is too much or they don't take it (Section 8 voucher).
Metropolitan Council (Robert Street)	 Safety followed by the community organizing. Jobs; access to living wage jobs and affordability. Education and safety (four participants). Transportation and convenience. Education. Security/safety/crime and transportation. Affordability. Affordability and between bus service/convenience. But I don't want to live with a slumlord either. Affordability and the good education. Safety and transportation. Safety and affordability but the condition of unit would win.
Eden Prairie Shopping Center	 Focused on schools and jobs—the normal things Children are our asset. We are focused on keeping our children safe and getting a good education. We are less concerned with transportation and jobs. We want their kids to grow up and help us, which was one of our goals for moving where we did. Even though we moved to suburban area with good schools, we still have housing problems. It is hard to find a Section 8 house. We got a job here first and then moved here because we like it. Many of them (Somali participants) start in Minneapolis. They have a problem with school and/or kids and they decide to move. Basically, good schools. Many times, when they try to move to a new location, no one will take the voucher. A lot of management issues. People know that when you have Section 8, they don't treat you the same. There is less maintenance. They see conflict between Section 8 inspectors and the owners. Tenants will often fix problems themselves.

	 Some issues in the high school between Somali kids and the teachers. People feel that teachers are acting "equal but separate." Maps were biased because there are more jobs in the suburban areas than shown, particularly Chanhassen. However, crime also exists out in the suburban areas. There are better schools in Minneapolis than what it appears to be. Some would like to go back to Minneapolis for more services but couldn't find a place to live by the good schools.
Metropolitan Council (Robert Street)	 Schools and transportation. School wins. Food and garden. Transportation. Garden wins. Transportation and grocery stores. Transportation. Same. Schools and transportation and better housing. Schools. Transportation and services. If you lose on one, lose on other. No one wins. If you loose on one, none trumps. Need them all to sustain. Transportation and service. I need to go to my doctor appointments. Transportation. Yes, I like to live in the yellow area maybe but I choose to live in the city.
Minneapolis Urban League	 Safety is first, school second. I have an 11-year-old. Amenities (nice unit with garage) and the location. Safety. Safety—the North Side is safe. Safety. I can't chose my priority. I like safety and schools. Safety first. I have lived here 50 years. 1985—that's when North Side went downhill. But we watch; we call. I like stability. That's why I have stayed here. Safety because I have grandkids. I have not lived in the suburbs but what I have noticed is that their damage deposits are lower. I did not choose Eden Prairie. I chose to live where I feel more at home. Well inspected decent housing. Community—I like the YWCA. I am 55+ and so age appropriate services matter.

Discussion	Comments
location Anoka Human Service Center	 I had to find HRA resources myself. They could better organize information, especially options for Section 8 voucher holders; something that helps people understand what's around a new place to live. Anoka has a housing line but you have to call. Metro HRA is the umbrella for us, for us as families, and they need to provide the information we need to make good decisions. Their information is out of date which causes delays in tangible resources, time, etc. Different people tell you different things. Is it discrimination? Is it just administrative confusion? Hard to tell. How can you keep your voucher if you have to leave the unit? If you run out of time you can't just double up with family member or friend. Support for when you have to move. I am appreciative of the programs and that I have a place to live but it is very hard to navigate the system. It's exhausting. No one wants to waste their time. I am working and 64. I am making too much money to hold on to my voucher so they want me to get a more expensive apartment. When I'm 70 I'll retire and I'll need the voucher again. It's confusing to know what to do. Speed up the inspection process. Simplify information. Too many places to go; leads to different answers. One source for housing questions. Support for moving and assistance during transition, especially under a time limit. Tightrope. How do you keep your voucher? You wait so long to get it. You respect and appreciate it but how can HRA support my keeping it? No shelters in Anoka County. No agency coordination and if they screw up you have no power over it.
Northwest Family Service Center Metropolitan Council (Robert Street)	 When you call and ask about an apartment, they say you have to pay the application fee, usually \$35. It's non-refundable. Then, if they won't lease to you, you go again; pay another fee. Who has the money for that? Metro HRA needs to provide more education to home owners about the program and the people using vouchers. Not asked
Eden Prairie Shopping Center	 Kid friendly areas, parks, need to know where the amenities are at and not just schools. Which apartment buildings have a community room? How are voucher amounts determined?
Metropolitan Council (Robert Street)	 Why do you have to come back to the city for a year? I was living in Ramsey County. Section 8 only gives you so much time to pick a place. I did not have choice. I was on a time limit. This is a very good meeting. You guys should have more of these meetings. Lived in apartment for about a year. My thing is I want to get out. They have mold. They don't fix things. I have kids and I want kids that are healthy. Where I live, there's mold, mushrooms growing in the windows. Everyone has problems. We've been calling and calling. With people don't have choice.

E.10 Any closing comments or suggestions for Metropolitan Council?

	 Section 8 wants more money if you have a part-time jobs. Parking downtown is expensive. If you have children, make sure it is a healthy environment. Access to transportation and good schools. My daughter comes over and has to pay for parking meter in downtown St. Paul. Should be parking area for people who live downtown. You cannot pay for parking when you are on a Section 8 voucher when you live downtown. Somebody has to hold these owners accountable. Hold landlords accountable, not at the expense of tenants. Bus: I have been a biker but there is not enough space for bikes, for more than two, more wheelchairs, woman with stroller. Section 8 don't give no protection. 'LLC' stands for lack of lawyers. Can't beat them. I am handicapped. Housing is not quite accessible for disabled people. Management parking spot is at the front of the building. Car towed. I never received notice. She parked up front and then her car was towed. Cost \$500 to get car back. Need more of everything. Involve community more. (Senior housing is) for people who turn 60 or 62, yet a person may want to live there earlier, such as 55.
Minneapolis Urban League	Not asked

Roundtable participant survey

Connecting People and Places to Opportunity: The Fair Housing and Equity Assessment

The Metropolitan Council and partners are committed to seeking input from many people and perspectives in our region in developing the Fair Housing and Equity Assessment. To compile accurate information about our outreach and interactions, we ask that you complete the brief survey below. Your responses are voluntary and will not be identified by individual. All responses will be compiled together and reported as a group.

What is your race?								
What city/neighborhood do you live in?								
Annual household income (please circle one):								
Up to \$10,000 \$10,000-20,000		\$20,000-40,0	\$40,000+					
Age:								
Do you have children living at home with you?								
If yes, ages of children:								
What kinds of transportation do you use in a typical week? (Please circle all that apply)								
	Car (own vehicle)		Car (belonging to family member or friend)					
	Bike	Transit/Bus	Taxi	Walk	Other			
Which best describes the housing you live in? (Please circle one)								
	Apartment – renter							
	Single family home – renter							
	Townhouse or condominium – renter							
	Other (please describe)							
Thank	Thank you!							

Appendix F: Defining Racially Concentrated Areas of Poverty (RCAP)

HUD's definition of RCAPs involves a racial/ethnic concentration threshold as well as a poverty test. Census tracts where 50% or more of the residents are families of color are considered racially/ethnically concentrated. In its poverty test, however, HUD allows metropolitan areas to choose the poverty thresholds most appropriate for their regions. Regions can choose a poverty threshold a poverty rate of 40% or more, or a poverty rate that is three times the average tract level for the region, whichever threshold is lower.

In choosing an RCAP definition, the Metropolitan Council opted for a definition that is more reflective of the Twin Cities region's demographic and socioeconomic profile. This definition varies from HUD's definition in a number of ways. The reasons behind the Council's decision to adopt a different definition are summarized below.

The Council defines a Racially Concentrated Area of Poverty (RCAP) as a census tract where 50% or more of the residents are individuals of color and at least 40% or more of the individuals have family incomes that are less than 185% of the federal poverty threshold.

HUD's definition of RCAPs is based upon the racial and poverty status of families, not of individuals. This definition underrepresents the share of people of color in the Twin Cities because people of color in the region tend to have more children than their white counterparts. For instance, while individuals of color make up 54% of Brooklyn Center's population, families of color constitute only 44% of the city's families.ⁱ The Council's RCAP definition counts individuals of color rather than families of color to ensure a proper count of the region's population of color.

Similarly, defining the poverty threshold of RCAPs based on the poverty status of families does not capture the true extent of poverty in the region. The U.S. Census Bureau's definition of family excludes households that are not considered a family.ⁱⁱ In the 13-county Twin Cities metropolitan area, approximately 35% of the population resides in non-family households. The region's RCAP definition is based on the poverty status of individuals in order to account for poverty among non-family households as well as families.

HUD defines poverty as 100% of the federal poverty threshold, which amounted to \$23,021 for a family of four in 2011. This is an unrealistically low measure of poverty for the Twin Cities given the region's relatively high median income. In fact, 100% of the federal poverty threshold in 2011 was less than 30% of the region's area median income (AMI)—\$24,690 in 2011. In contrast, many federal assistance programs, such as the Reduced-Price Lunch program and the Women, Infants and Children program (WIC), consider residents with family incomes less than 185% of the federal poverty threshold eligible for financial assistance.

This federal eligibility threshold, which was equal to \$42,589 for a family of four in 2011, roughly corresponds to 50% of the region's AMI— \$41,150 in 2011. The eligibility threshold for HUD-funded assistance programs such as Section 8 vouchers is also 50% of the region's AMI. The region includes a significant number of residents whose family incomes are between 100% and 185% of the federal poverty threshold. In order to adequately capture these low-income residents, the Council decided that 185% of the federal poverty threshold is a more appropriate poverty threshold for the region.

Until recently, 40% poverty was commonly considered the threshold above which the social and economic costs associated with concentrated poverty emerge. Recent research by George Galster, however,

ⁱU.S. Census Bureau, Decennial Census, 2010.

ⁱⁱ The U.S. Census Bureau defines a family as "a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption." (Source: 2010 Census Briefs, *Households and Families: 2010*, p.4, April 2012).

demonstrates that the negative effects of concentrated poverty emerge at lower levels. Galster's research shows that 20% poverty is the threshold where these negative effects escalate before they plateau at 40%.^{III} However, Galster's findings are based on the 100% of the federal poverty threshold definition of poverty. Because of this discrepancy in the income levels used to define poverty, Galster's findings could not be used as a reference point. In order to resolve this issue, the Council staff first identified the census tracts that would qualify as areas of concentrated poverty based on Galster's definition. Then, the poverty threshold that would most closely approximate these census tracts based on the Council's definition of poverty was explored. The exploration showed that census tracts that were identified as areas of concentrated poverty threshold most closely approximated the census tracts identified by using Galster's definition. As a result, the Council chose 40% poverty measured at 185% of the federal poverty threshold as its poverty threshold to define the region's RCAPs.

^{III} George C. Galster, "The Mechanism(s) of Neighborhood Effects: Theory, Evidence, and Policy Implications," Neighborhood Effects Research: New Perspectives (2012): 23-56.

Appendix G: Demographic and housing characteristics of RCAP communities

In order to create consistent sets of geographic boundaries for each Racially Concentrated Area of Poverty, Metropolitan Council staff manually assigned 1990 and 2000 census block groups to each 2010 RCAP.^{IV}

When a 1990 or 2000 census block group did not lie completely within the boundary of a 2010 Racially Concentrated Area of Poverty, Council staff used information on the centers of the block group's land area and population to determine whether to assign it to the 2010 Racially Concentrated Area of Poverty.

G.1 Population numbers by race and ethnicity in RCAP communities in 1990, 2000 and 2010

Racially Concentrated Area of Poverty	Year	Total population	White, non- Latino	Black, non- Latino	Latino	Asian, non- Latino	Native American, non- Latino	Other race or multiracial, non-Latino
Brooklyn	1990	23,176	19,993	1,840	300	813	191	39
Center and	2000	23,514	13,794	5,303	1,017	2,309	202	889
Brooklyn Park	2010	25,634	8,516	9,352	3,377	3,315	97	977
	1990	55,321	30,394	17,393	1,309	4,104	1,911	210
North Minneapolis	2000	58,132	16,982	25,364	3,080	8,544	1,032	3,130
Minicapons	2010	51,823	13,124	23,436	4,996	6,705	783	2,779
0.11	1990	55,267	29,163	14,073	1,864	4,223	5,777	167
South Minneapolis	2000	64,075	20,486	19,017	12,737	4,758	3,149	3,928
minicapono	2010	64,498	19,891	20,041	17,237	2,623	2,389	2,317
Richfield-	1990	8,572	7,477	534	131	312	101	17
Fort Snelling-	2000	8,485	5,369	1,201	995	499	110	311
Minneapolis	2010	8,718	3,920	1,250	2,733	406	113	296
	1990	7,231	4,080	273	2,061	683	125	9
West Side	2000	7,983	2,979	556	3,283	761	118	286
	2010	7,444	2,421	1,058	2,854	763	78	270
	1990	54,448	43,734	2,739	2,509	4,381	995	90
East Side	2000	62,981	31,277	7,476	7,134	13,588	940	2,566
	2010	61,717	21,486	10,472	9,328	17,361	723	2,347
	1990	14,556	9,731	661	685	3,122	336	21
North End	2000	15,469	7,423	2,188	1,299	3,715	208	636
	2010	15,895	4,890	3,295	1,820	5,049	190	651
Dale-Summit- University	1990	26,666	11,285	8,642	1,151	4,967	537	84
	2000	30,654	7,819	9,978	2,180	8,594	333	1,750
	2010	27,738	6,785	10,578	2,117	6,766	263	1,229

Source: Metropolitan Council staff calculations based on U.S. Census Bureau, Decennial Census, 2010.

¹ Census block groups are smaller statistical units than census tracts. They generally contain between 600 and 3,000 people.

G.2 Population percentages by race and ethnicity in RCAP communities in 1990, 2000 and 2010

Racially Concentrated Area of Poverty	Year	Total population	White, non- Latino	Black, non- Latino	Latino	Asian, non- Latino	Native American, non- Latino	Other race or multiracial, non-Latino
Brooklyn	1990	23,176	86%	8%	4%	1%	1%	0%
Center and	2000	23,514	59%	23%	10%	4%	1%	4%
Brooklyn Park	2010	25,634	33%	36%	13%	13%	0%	4%
	1990	55,321	55%	31%	7%	2%	3%	0%
North Minneapolis	2000	58,132	29%	44%	15%	5%	2%	5%
Minicapons	2010	51,823	25%	45%	13%	10%	2%	5%
	1990	55,267	53%	25%	8%	3%	10%	0%
South Minneapolis	2000	64,075	32%	30%	7%	20%	5%	6%
Minicapons	2010	64,498	31%	31%	4%	27%	4%	4%
Richfield-	1990	8,572	87%	6%	4%	2%	1%	0%
Fort Snelling-	2000	8,485	63%	14%	6%	12%	1%	4%
Minneapolis	2010	8,718	45%	14%	5%	31%	1%	3%
	1990	7,231	56%	4%	9%	29%	2%	0%
West Side	2000	7,983	37%	7%	10%	41%	1%	4%
	2010	7,444	33%	14%	10%	38%	1%	4%
	1990	54,448	80%	5%	8%	5%	2%	0%
East Side	2000	62,981	50%	12%	22%	11%	1%	4%
	2010	61,717	35%	17%	28%	15%	1%	4%
	1990	14,556	67%	5%	21%	5%	2%	0%
North End	2000	15,469	48%	14%	24%	8%	1%	4%
	2010	15,895	31%	21%	32%	11%	1%	4%
	1990	26,666	42%	32%	19%	4%	2%	0%
Dale-Summit- University	2000	30,654	26%	33%	28%	7%	1%	6%
onversity	2010	27,738	24%	38%	24%	8%	1%	4%

Source: Metropolitan Council staff calculations based on U.S. Census Bureau, Decennial Census, 2010.

G.3 Nativity and poverty status in RCAP communities in 1990, 2000 and 2010

Racially Concentrated Area of Poverty	Year	Total population	Foreign- born residents (#)	Foreign- born residents (%)	Population for whom poverty status is determined	Population in poverty (#)	Population in poverty (%)
Brooklyn	1990	23,176	698	3%	23,087	5,373	23%
Center and Brooklyn	2000	23,514	4,189	18%	23,370	5,822	25%
Park	2007-2011	25,900	7,456	29%	25,796	12,558	49%
	1990	55,321	3,789	7%	54,050	25,310	47%
North Minneapolis	2000	58,132	8,981	15%	56,787	27,452	48%
minicapono	2007-2011	50,051	7,388	14%	49,490	29,410	59%
0	1990	55,267	5,588	10%	52,086	30,804	59%
South Minneapolis	2000	64,075	19,960	31%	60,626	34,488	57%
	2007-2011	62,475	20,802	32%	59,403	37,798	64%
Richfield-	1990	8,572	344	4%	8,372	1,814	22%
Fort Snelling-	2000	8,485	1,375	16%	7,952	2,281	29%
Minneapolis	2007-2011	8,858	2,521	29%	8,670	4,648	54%
	1990	7,231	933	13%	7,043	3,013	43%
West Side	2000	7,983	2,014	25%	8,014	2,890	36%
	2007-2011	8,220	2,375	32%	8,195	4,510	55%
	1990	54,448	4,008	7%	53,780	20,049	37%
East Side	2000	62,981	12,580	20%	62,295	25,986	42%
	2007-2011	62,798	16,248	26%	61,798	34,259	55%
North End	1990	14,556	2,252	15%	14,334	7,019	49%
	2000	15,469	3,102	20%	15,345	7,240	47%
	2007-2011	16,338	4,251	27%	16,217	9,592	59%
Dale-Summit- University	1990	26,666	4,267	16%	25,678	14,396	56%
	2000	30,654	8,180	27%	29,718	15,246	51%
	2007-2011	27,209	7,822	28%	26,649	16,945	64%

Source: Metropolitan Council staff calculations based on U.S. Census Bureau, American Community Survey, 2007-2011.

G.4 Occupancy status and tenure of housing units in RCAP communities in 1990, 2000 and 2010

Racially Concentrated Area of		Total housing	Vacant units		Owner-occupied units		Renter-occupied units	
Poverty	Year	units	#	%	#	%	#	%
Brooklyn	1990	9,766	569	6%	4,341	44%	4,856	50%
Center and Brooklyn	2000	9,497	203	2%	4,471	47%	4,823	51%
Park	2010	9,811	581	6%	4,163	42%	5,067	52%
	1990	22,202	2,087	9%	10,780	49%	9,335	42%
North Minneapolis	2000	19,589	1,240	6%	10,738	55%	7,611	39%
winneapons	2010	19,930	2,667	13%	8,399	42%	8,864	44%
	1990	26,127	2,952	11%	5,144	20%	18,031	69%
South Minneapolis	2000	24,695	1,174	5%	5,804	24%	17,717	72%
winneapons	2010	25,891	2,295	9%	5,540	21%	18,056	70%
Richfield-	1990	3,866	241	6%	2,042	53%	1,583	41%
Fort Snelling-	2000	3,364	53	2%	1,787	53%	1,524	45%
Minneapolis	2010	3,523	248	7%	1,630	46%	1,645	47%
	1990	2,766	154	6%	1,421	51%	1,191	43%
West Side	2000	2,682	61	2%	1,458	54%	1,163	43%
	2010	2,727	261	10%	1,319	48%	1,147	42%
	1990	22,589	1,497	7%	11,236	50%	9,856	44%
East Side	2000	21,982	751	3%	11,688	53%	9,543	43%
	2010	22,343	2,303	10%	9,794	44%	10,246	46%
	1990	5,682	352	6%	2,837	50%	2,493	44%
North End	2000	5,538	194	4%	2,828	51%	2,516	45%
	2010	5,674	568	10%	2,287	40%	2,819	50%
Dala Committe	1990	10,749	1,111	10%	3,779	35%	5,859	55%
Dale-Summit- University	2000	10,377	532	5%	3,909	38%	5,936	57%
onversity	2010	10,605	1,006	9%	3,321	31%	6,278	59%

Source: Metropolitan Council staff calculations based on U.S. Census Bureau, Decennial Census, 2010.

G.5 Housing cost burden and publicly subsidized affordable rental units in RCAP communities in 1990, 2000 and 2010

Racially Concentrated Area of Poverty	Year	Households for which cost burden is computed	Households experiencing housing cost burden (#)	Households experiencing housing cost burden (%)		Year	Publicly subsidized affordable rental units
Brooklyn Center and	1990	9,766	2,607	41%			419
	2000	9,497	2,642	30%		2012	
Brooklyn Park	2007-2011	8,922	4,646	52%			
	1990	22,202	6,765	57%			
North Minneapolis	2000	19,589	6,473	40%	2012		3,305
winneapons	2007-2011	17,382	9,758	56%			
0 11	1990	26,127	9,985	54%			7,552
South Minneapolis	2000	24,695	8,142	39%		2012	
Winneapons	2007-2011	24,087	13,144	55%			
Richfield- Fort Snelling-	1990	3,866	829	39%			326
	2000	3,364	937	30%		2012	
Minneapolis	2007-2011	3,366	1,529	45%			
	1990	2,766	906	61%			
West Side	2000	2,682	637	26%		2012	334
	2007-2011	2,630	1,142	43%			
	1990	22,589	7,216	59%			
East Side	2000	21,982	6,206	32%		2012	2,261
	2007-2011	20,090	9,510	47%			
North End	1990	5,682	1,718	57%	2012		
	2000	5,538	1,521	32%			812
	2007-2011	5,101	2,669	52%			
Dala Summit	1990	10,749	3,550	56%			
Dale-Summit- University	2000	10,377	3,184	36%	2012		2,594
oniversity	2007-2011	9,112	4,750	52%			

Source: Metropolitan Council staff calculations based on U.S. Census Bureau, American Community Survey, 2007-2011; HousingLink, 2012.

Note: Households whose housing costs are at least 30 percent of their household income are classified as experiencing housing cost burden.

Appendix H: Opportunity cluster analysis, technical documentation

The Council explored a wide variety of metrics to measure the types of opportunities valued by Twin Cities residents. The Council's research team surveyed the nation to identify regions that conducted a spatial analysis of opportunity and produced a list of eleven areas.^v The team examined these areas in order to create an extensive list of opportunity indicators used in the nation.^{vi} Local stakeholders and project partners were then consulted to identify what kinds of opportunities matter most to the residents of the Twin Cities region.

The cluster analysis conducted to explore the geography of opportunity in the Twin Cities metro was implemented by the Institute on Metropolitan Opportunity, University of Minnesota Law School. The Institute used the SPSS K-means cluster analysis to assemble the region's census tracts into groups based on their characteristics in five opportunity dimensions. The indicators used to measure each of these opportunity dimensions are summarized below. The metrics used to measure each opportunity dimension were calculated at the census tract level and normalized into z-scores (number of standard deviations from the mean). Outliers—z-scores greater than 3 or less than -3—were rounded to 3 or -3. Outliers constituted less than 0.8% of the z-scores. Individual scores for each opportunity dimension were then calculated as the mean of the z-scores of all the metrics that went into measuring that opportunity dimension.

K-means clustering partitions the observations (704 census tracts in this case) into a given number of groups based on the values of a set of grouping variables. The procedure minimizes the within-cluster sum of squared differences between actual values of the grouping variables and the means of the clusters. The cluster analysis grouped tracts in the seven-county Twin Cities metro based on the mean values for the five opportunity dimensions. The procedure was run for a number of specifications. Four runs grouped all tracts into three, four, five and six clusters. The resulting clusters were very stable and the Data and Mapping Team and the Metropolitan Council's research staff opted for the three-cluster run. The three-cluster run was then repeated for tracts that were at least 33% within the 2030 MUSA. 648 of the 704 census tracts met this criterion. An additional 12 tracts were added to the analysis on the advice of Council staff.

Data Sources and Methodology

This report focuses on five different dimensions of opportunity. The specific details of the metrics used to measure them are discussed below. It is important to note that housing and transit were initially considered as individual opportunity dimensions.^{vii} Ultimately, in choosing the indicators to measure access to opportunity, housing and transit were treated as policy layers that impact access to opportunity rather than

^v These areas, which include some that have received Sustainable Communities Regional Planning Grants, are: Atlanta; Austin; Boston; Hartford; Denver; Detroit; King County, WA; Portland, Oregon; Puget Sound, Seattle; Sacramento; and Washington County, Oregon.

^{vi} The list of opportunity indicators included metrics such as school proficiency; unemployment rates; public assistance rates; housing stability; poverty rates; job access; neighborhood health; transit access; hazard exposure; health care; crime; affordable housing; healthy food options; recreational services; voter turnout rates; and arts and culture.

^{vii} HUD and many other regions used various housing metrics to capture neighborhood quality. Rates of homeownership, vacancy and foreclosure rates, housing cost burden, and housing stock measures were among the metrics used. Among these metrics, homeownership rates and housing cost burden were excluded as people-based metrics. In addition, some place-based metrics such as foreclosure, vacancy, and high-cost loan rates were excluded for a number of reasons. Foreclosed and vacant properties clearly impact the quality of the neighborhoods where historically disadvantaged residents live. However, disparities in foreclosure and vacancy rates are a manifestation rather than the source of the disparate impact of the housing crisis on residents of color and low-income residents. In fact, these disparities arise from the racially discriminatory practices—such as predatory lending and the steering of borrowers of color into sub-prime loans—prevalent in real estate, mortgage, and insurance markets. Moreover, metrics such as homeownership, foreclosure, and vacancy rates tend to oscillate over time as housing market conditions and lending standards change. To the extent that housing market conditions and lending standards change independent of the spatial dynamics of access to opportunity in a region, these metrics can be misleading indicators of neighborhood quality.

as individual dimensions of opportunity. The potential impact of these policies on the region's geography of opportunity are discussed in detail in Section Seven.

Education

The Multiple Measurement Rating (MMR) system developed by the Minnesota Department of Education was examined as a measure of educational performance. The MMR is a composite index, which measures proficiency, student growth, achievement gap reduction, and graduation rates. Schools earn points in each category and these points determine a school's final MMR score.

While the MMR is a holistic measure that tries to capture educational performance in multiple dimensions, it has its limitations. For instance, in schools where most of the students are high performing, the student growth component of the MMR tends to work against a school. When most of the students are already performing at high levels, a school does not have much room for improvement, making it technically impossible for a school to make progress.

Another limitation pertains to the achievement gap component of the measure. A significant number of schools do not have enough racial diversity to measure the comparative performance of white students and students of color. As a result, these schools lack the achievement gap component of the MMR, making it impossible to assign an MMR score to each school. For these reasons, the MMR score was ruled out as a measure of school performance.

In order to measure the quality of schools in a community, HUD provided a Neighborhood School Proficiency Index to the Sustainable Communities Regional Planning grantees. This index was not used because it only incorporated elementary school variables. Instead, a much broader measure that reflected the overall K-12 educational performance of students was selected. The key education benchmarks used to construct this measure were identified by Generation Next, a partnership of leaders from local schools, universities, governments, businesses, and community and philanthropic organizations. The benchmarks identified by Generation Next correspond to those used by educators across the nation and include reading proficiency by the end of the 3rd grade, math proficiency by the end of the 8th grade, and on-time high school graduation rates.

Data for these three variables were obtained from the Minnesota Department of Education. The 2011-2012 Minnesota Comprehensive Assessments (MCA) Series II Reading Grade 3 and Series III Math Grade 8 scores were used to determine proficiency levels. Proficiency scores were calculated by dividing the number of students that met or exceeded the proficiency standard by the number of students who were tested.

Four-year graduation rates were calculated by using data from the 2010-2011 academic year. In order to calculate on-time graduation rates, the number of first-time ninth grade students in a cohort and the number of students transferring into the cohort were added; then the number of students transferring out of the cohort was subtracted from this total.

Data were collected for three geographies: elementary, middle, and high school attendance area boundaries. School attendance boundary data were obtained from the Minnesota Geospatial Information Office as provided by the Minnesota Department of Education. The census tract level estimates of the education variables were calculated as weighted averages for the schools that serve each tract. A proportional split method was used based on school attendance areas that covered, or partially covered, each tract.

A proficiency rate or graduation rate for a tract was calculated as a weighted average of the values for all school attendance areas completely or partially contained within the tract. The weights were determined by the percentage of the tract's total area included in each of the relevant attendance boundaries. For example, if 60 percent of a census tract's area was inside one school's attendance area, and 40 percent was within a second school's attendance area, the tract was assigned a rate equal to the sum of 60 percent of the first school's rate and 40 percent of the second school's rate.

Education indicators:

- Percent of 3rd grade students meeting or exceeding reading proficiency levels (Source: The Minnesota Comprehensive Assessments (MCA) Series II scores from the MN Department of Education, 2011-2012)
- Percent of 8th grade students meeting or exceeding math proficiency levels (Source: The Minnesota Comprehensive Assessments (MCA) Series III scores from the MN Department of Education, 2011-2012)
- Four-year high school graduation rates (Source: MN Department of Education, 2010-2011)

Environment

HUD provided the grantees with an Environment Health Hazard Exposure Index, which summarized potential exposure to harmful toxins at the block-group level. Potential health hazards exposure is modeled as a function of the volume of toxic industrial releases from the EPA's Toxic Release Inventory, the EPA toxicity assessment of the released chemicals, and the distance to the toxic release facility. While HUD provided a health hazard exposure index value for each block group, it provided neither intermediary data nor any details on the actual calculation of the index values.

Since every other variable in the opportunity analysis was calculated at the census tract level, it was necessary to aggregate the block-group level indices to census tract geographies. The unavailability of intermediary data and the absence of detailed information on the calculation of the index made it impossible to calculate the Health Hazard Exposure Index at the census tract level. As a result, the census tract-level index was calculated by using a weighted average of the block group indices. The weights used were proportional to the area occupied by each block group within each census tract. The weights were based on area rather than on population because HUD's index is a function of distance to toxic release facility rather than of population density.

In order to enhance the quality of the HUD-provided index, two local datasets were used to generate three additional measures of environmental quality: contaminated sites, landfills, and land uses that constitute disamenities for residents. Spatial data on contaminated sites and landfills were obtained from the Minnesota Pollution Control Agency (MPCA). Contaminated site and landfill locations were collected from MPCA's *What's in My Neighborhood?* dataset (WIMN). WIMN dataset provides information on 25 permitted activities including air permits, solid waste, investigation, and cleanup projects.

The landfill indicator consists of Unpermitted Dump Sites, Open Landfills, Closed Landfills, and Landfills Permitted by Rule. The contaminated sites indicator consists of Petroleum Brownfield, Voluntary Investigation & Cleanup (VIC), Resource Conservation and Recovery Act (RCRA) Cleanup Sites, Superfund Sites, and Leak Sites.

Disamenity land use data were obtained from the MetroGIS DataFinder website. The Metropolitan Council provides data on Generalized Land Use for 2010 for the seven-county metropolitan area. This dataset identifies 16 general land use categories: Agriculture; Airport; Extractive; Golf Course; Industrial and Utility;

Institutional; Major Highway; Mixed Use; Multifamily Residential; Office, Park/Recreational or Preserve; Railway; Retail and Other Commercial; Single Family Residential; Undeveloped; and Water. Five of these land uses were identified as disamenities: Airport; Extractive; Industrial and Utility; Major Highway; and Railway.

The number of contaminated sites and landfills in each census tract was counted and normalized by the tract area. Disamenity land use was calculated as a percentage of the total land area in each census tract. These three variables as well as HUD's Environmental Health Hazard Exposure Index were used to capture the effect of environmental disamenities on the region's geography.

Environment indicators:

- **Contaminated land as a percentage of total land area** (Source: Minnesota Pollution Control Agency's *What is in My Neighborhood?* dataset)
- **Disamenity land use as a percentage of total land area** (Source: Metropolitan Council Generalized Land Use data for 2010)
- Landfills as a percentage of total land area (Source: Minnesota Pollution Control Agency's *What is in My Neighborhood?* dataset)
- HUD Health Hazards Exposure Index (Source: HUD)

Crime

Crime data were gathered from local police departments, LOGIS (a local government consulting firm), and the FBI's Uniform Crime Report. Crime data were obtained in four principal geographies: the address level in certain suburban municipalities; the neighborhood level in Minneapolis, Saint Paul, and Bloomington; the quad and grid level in some inner-ring suburban locations; and at the county level in many of the suburban and exurban areas.

Address-level data were geo-coded by the University of Minnesota's Center for Urban and Regional Affairs (CURA) staff to calculate crime rates for each census tract in the corresponding municipality. Neighborhood-level crime rates were overlaid with census tract boundaries. In census tracts that crossed neighborhood boundaries, census tract crime rates were calculated by using an area-based weighted average of each neighborhood's crime rate. In areas where crime rates were only available at the county level, each census tract within the county boundary was assigned the county's overall crime rate.

Crime rates were calculated by using the number of serious crimes per 100,000 persons. Serious crime definition included Part I, Category 1 as well as Part I, Categories 3 through 8 of the FBI Uniform Crime Database. This definition includes criminal homicide; robbery; aggravated assault; burglary (breaking or entering); larceny theft; motor vehicle theft; and arson. The Data and Mapping Team did not include Part II crimes because the data are considered less reliable due to non-uniform reporting standards.

It is important to note a number of limitations associated with the safety measure used in this report. First, safety is measured by using census-tract level crime rates for 2010. This single-year measure of safety might not capture the safety of communities accurately especially when there are unusual deviations from the norm in 2010. Averaging multiple years of crime rates for each census tract would improve the accuracy of this safety measure significantly. Within the limited time frame of this report, however, the Council staff was unable to gather crime data for multiple years. Future analysis of safety should use a more robust measurement that is based on multiple years of crime data. Second, safety as a concept involves more than exposure to crime. A more comprehensive measure of safety should include, for instance, exposure to traffic-related accidents by various modes of transportation such as automobiles and

bicycles. Further analysis should explore data sources for death and injury rates associated with automobile and bicycle accidents.

Crime and safety indicator:

 Serious crimes per 100,000 residents (Source: Local Police Departments, LOGIS [a local government consulting firm], and FBI's Uniform Crime Report)

Definition of access

The Council explored two different notions of transit access. The first one regards access to transit as an asset in itself that should be considered a distinct dimension of opportunity in a place. According to this perspective, the presence of transit infrastructure, especially in the case of light rail trains, attracts new investments in places, creating additional opportunities for community development. In order to reflect this notion of transit access, a Transit Accessibility Index based on the geography of the region's existing transit network was constructed.

Transit lines were assigned weights according to the frequency and scope of the available service in order to capture differences in the quality of transit routes. An accessibility score was then assigned to each census tract based on the percentage of each census tract that was within a quarter of a mile buffer of transit routes. In cases where multiple transit lines crossed a census tract, a weighted average of access scores for each transit line were used to measure transit accessibility for these census tracts.

The second notion treats transit as a means of getting to specific locations such as jobs and other non-jobrelated destinations. In order to reflect the spirit of HUD's Transit Access Index, the notion of 'transit as a means to get somewhere' as opposed to 'transit as a good in itself' was chosen. As a result, the Transit Accessibility Index was abandoned in favor of two separate accessibility indices: job access and access to non-job-related destinations such as social services and basic necessities.

Job access

Access to jobs and other non-job-related destinations was measured for two different modes of transportation: car and transit. In order to evaluate the degree to which each census tract had access to jobs, a cumulative accessibility measure was used. This measure was constructed by adding the total number of jobs accessible to residents of each census tract within 20 minutes or less of drive time. Similarly, the total number of jobs accessible to residents of each tract within 45 minutes or less of transit time was calculated in order to measure access via transit. The Quarterly Census of Employment and Wages (QCEW) was the source of the employment data.

The cumulative job accessibility measure that HUD provided is a distance-based accessibility index, which measures distance as the crow flies. The Data and Mapping Team decided that a distance-based index where distance is measured as network distance was a more realistic measure of cumulative job accessibility. A network distance-based accessibility measure uses actual travel routes based on existing road and transit networks. The Team was able to improve the cumulative job accessibility measure even further by using the Metropolitan Council's Transportation Forecast Model data. This database, which is based on existing transportation network distances, provides origin-destination travel times for two different transportation modes. This data enabled the construction of a network time-based cumulative job accessibility measure that is more accurate than the one HUD provided.

Metropolitan Council Transportation Staff provided travel time matrices that included travel times from each Traffic Analysis Zone (TAZ) of origin to all destination Traffic Analysis Zones for both travel modes. While

Council Transportation Staff suggested the use of peak hour travel times to calculate accessibility by car, they recommended the use of midday travel times, rather than peak hour travel times, to measure accessibility by transit. Express transit services are available exclusively during peak hours and not during the rest of the day. Moreover, most of these express rides originate from park and ride locations and involve trips that necessitate the use of cars as well as transit. In order to capture the true extent of the region's high frequency transit network, the Staff recommended the use of the midday travel time matrix that excluded trips involving the use of a car as a more realistic measure of transit accessibility.

Metropolitan Council Regional Policy and Research Staff then converted the TAZ-based matrices into census tract-based matrices, which were then used for constructing the cumulative accessibility measures. In order to determine the destination census tracts accessible to each census tract of origin, only tract-to-tract trips that lasted less than 20 minutes or less by car were selected from the peak-hour travel time matrix. The total number of jobs in each of these destination tracts was summed to calculate the cumulative job accessibility measure for each census tract of origin. Job accessibility via transit was calculated in a similar fashion by using the midday transit travel time matrix by selecting only trips that lasted 45 minutes or less.

The opportunity analysis aims to capture specific opportunities accessible to low-income residents as well as the residents of the region as a whole. Low-income residents tend to have lower levels of educational attainment that typically limit their employment options to low-skill, entry-level jobs. A separate accessibility index that focused exclusively on access to low-skill, entry-level jobs was created to account for this fact. However, due to the absence of employment data on low-skill, entry-level jobs, Longitudinal Employer-Household Dynamics (LEHD) data on low-wage jobs were used as a proxy for low-skill, entry-level jobs.

LEHD data break down jobs into three categories based on the wages they generate. These categories include jobs that generate wages less than \$15,000; jobs that generate wages between \$15,000 and \$39,999; and jobs that generate wages that exceed \$40,000. Jobs that generate wages less than \$40,000 were classified as low-wage jobs. Separate job accessibility indices for these jobs were created to capture the types of jobs that low-income residents are likely to qualify for.

Job access indicators:

- Total number of jobs accessible within 20 minutes of drive time during AM rush hour (Source: Quarterly Census of Employment Wages data and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of jobs accessible within 45 minutes of transit travel time at midday (Source: Quarterly Census of Employment Wages data and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of low-wage jobs accessible within 20 minutes of drive time during AM rush hour (Source: Longitudinal Employer-Household Dynamics data and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of low-wage jobs accessible within 45 minutes of transit travel time at midday (Source: Longitudinal Employer-Household Dynamics data and the Metropolitan Council Twin Cities Regional Travel Demand Model)

Access to social services and basic necessities

A cumulative accessibility measure that resembled the job access index was used in order to evaluate the degree to which each census tract has access to non-job-related destinations. This measure was

separately calculated for accessibility by car and by transit by summing the total number of non-job-related destinations accessible to residents of each census tract within 20 minutes or less of drive time and within 30 minutes or less of transit time. The transit travel time threshold used for access to social services and basic necessities is 30 minutes rather than 45 minutes. While residents might need to travel 45 minutes to work out of necessity, they might find a 45 minute trip to non-job-related destinations inconvenient. So a 30-minute travel threshold was used in order to exclude inconvenient destinations to which residents were less likely to travel.

In order to capture access to social service facilities that are of special importance to the well-being of lowincome residents, the following facilities were singled out: affordable childcare facilities, social service and support facilities (such as homeless shelters, food shelves, and community clinics), and workforce centers. This access category also included the following facilities that are necessities not only for low-income residents but also for residents of all income levels: childcare facilities (affordable and non-affordable); grocery stores (especially to address the issue of 'food deserts'); libraries (especially as a public resource for accessing computers, for assistance with job applications, and for learning English as a second language for recent immigrants); hospitals and health care clinics; pharmacies; places of worship (not strictly as faith institutions that provide spiritual guidance but mostly as institutions that provide economic assistance to those in need and as social and cultural networks to meet the basic, day-to-day needs of lowincome residents and residents of color); and shopping centers. The following sections summarize the specific data sources for identifying the location of each non-job-related destination and the methodology used to prepare this information for the cluster analysis.

Child Care Facilities

Minnesota Child Care Resource and Referral Network provided the data on childcare facilities within the 7county metropolitan area. The Network surveys childcare providers about whether or not they currently enroll or are willing to accept children receiving Child Care Assistance. Care facilities that either accepted children receiving Child Care Assistance or expressed a willingness to do so were identified as affordable childcare facilities.

Metropolitan Council GIS staff geo-coded the locations of these facilities (affordable facilities and all facilities regardless of their affordability separately), assigned them to the appropriate census tracts, and calculated the number of each type of facility in each census tract.

Grocery Stores

Every fiscal year, United States Department of Agriculture (USDA) Food and Nutrition Service provides a list of grocery stores that accept Supplemental Nutrition Assistance Program payments. This database is located at <u>http://www.snapretailerlocator.com</u>. Using this database for the Fiscal Year 2010, Jerry Shannon of the Department of Geography at the University of Minnesota coded all the grocery stores in the state based on the general description the USDA gives for their store classification. Council GIS staff geo-coded the dataset and selected the grocery stores within the seven-county metro boundaries. The SNAP store list was classified as follows:

- 1. All supermarkets and supercenters (e.g. Walmart and Target with grocery offerings)
- 2. Supermarkets that are not considered supercenters (e.g. Walmart, Target, Costco, and Sam's Club)
- 3. Medium to small grocers (e.g. Aldi, Trader Joe's, co-ops, and ethnic food stores)
- 4. Convenience stores, pharmacies, gas stations, and dollar stores offering mostly processed foods, modest selection, and a large amount of other non-food items
- 5. Meat markets
- 6. Other specialty foods (produce), take out, and food shelf services
- 7. Online grocers (e.g. Coborns Delivers)

8. Farmers markets

The research team created two different categories for grocery stores based on Mr. Shannon's classification: large and medium-to-small. Access to each type of grocery store was measured separately in order to capture the differences in the range of food products offered by different types of grocery stores. Large grocery stores included categories 1 and 2 and medium-to-small grocery stores comprised categories 3, 5, and 8. Stores within Category 4 were excluded because the specific food products offered by these stores are typically deemed unhealthy and overpriced. Categories 6 and 7 were not included in the classification. Category 6 was excluded in order to avoid double counting food shelf services, because the research team accounted for food shelves by using a different dataset on social service facilities. Category 7 was excluded because delivery areas rather than the actual location of an online grocery store determine the geographic availability of groceries.

Libraries

Council GIS staff geo-coded the locations of all libraries listed in the Minnesota Department of Education website and identified those within the seven-county metropolitan area.

Hospitals and Health Care Clinics

The Minnesota Department of Health has a comprehensive list of hospitals and health care providers that is updated on an ongoing basis. Council GIS staff geo-coded the locations of all hospitals included in this list and identified the ones located within the seven-county metropolitan area. For health clinics, Council staff obtained the Minnesota Medical Directory data maintained by Jola Publications. Council GIS staff then geo-coded the locations of all health care clinics included in this list and identified the ones located within the seven-county metropolitan area.

Social Services and Supports

The Minnesota Council of Nonprofits (MCN) maintains a list of all nonprofits in the state of Minnesota including an extensive list of member nonprofits that are classified according to the National Taxonomy of Exempt Entities (NTEE) Classification System. Metropolitan Council staff acquired this member list and geo-coded it to identify the nonprofits located within the seven-county metropolitan area. Staff then used the NTEE Classification System to select nonprofits that offer human services.

WorkForce Centers / Job training locations

Minnesota Department of Employment and Economic Development (DEED) maintains a list of WorkForce Centers in the Minnesota WorkForce Center System. Council staff combined this list with the Minnesota Council of Nonprofits' list of nonprofits that focus on workforce training and created a more extensive list of job training services. Staff then geo-coded the addresses to identify the locations of WorkForce Centers and job training locations located within the seven-county metropolitan area.

Pharmacies, Places of Worship and Shopping Centers

Metropolitan Council Community Development Division's Landmarks database was the source for pharmacies, places of worship, and shopping centers.

Access to Parks, Trails and Open Spaces

The Metropolitan Council Regional Parks staff was consulted about attendance areas for different types of parks, trails, and open spaces in the region. Staff suggested the following proximity measures as indicators of decent access to parks and open spaces: areas within one quarter mile buffer of a local park, within one and a half mile buffer of a trail, or within half a mile buffer of a regional park. Metropolitan Council GIS staff

mapped these buffers of access and conducted a spatial analysis to calculate the percentage of each census tract that fell within these buffers of access.

Access to social services and basic necessities indicators:

- Total number of affordable child care centers accessible within 20 minutes of drive time during AM rush hour (Source: Minnesota Child Care Resource and Referral Network and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of affordable child care centers accessible within 30 minutes of transit travel time at midday (Source: Minnesota Child Care Resource and Referral Network and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of child care centers accessible within 20 minutes of drive time during AM rush hour (Source: Minnesota Child Care Resource and Referral Network and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of child care centers accessible within 30 minutes of transit travel time at midday (Source: Minnesota Child Care Resource and Referral Network and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of hospitals accessible within 20 minutes of drive time during AM rush hour (Source: Minnesota Department of Health and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of hospitals accessible within 30 minutes of transit travel time at midday (Source: Minnesota Department of Health and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of health care clinics accessible within 20 minutes of drive time during AM rush hour (Source: Minnesota Medical Directory data from Jola Publications and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of health care clinics accessible within 30 minutes of transit travel time at midday (Source: Minnesota Medical Directory data from Jola Publications and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of pharmacies accessible within 20 minutes of drive time during AM rush hour (Source: Metropolitan Council Community Development Landmarks database and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of pharmacies accessible within 30 minutes of transit travel time at midday (Source: Metropolitan Council Community Development Landmarks database and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of large grocery stores accessible within 20 minutes of drive time during AM rush hour (Source: USDA, Jerry Shannon at the U of M Department of Geography, and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of large grocery stores accessible within 30 minutes of transit travel time at midday (Source: USDA, Jerry Shannon at the U of M Department of Geography, and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of medium to small grocery stores accessible within 20 minutes of drive time during AM rush hour (Source: USDA, Jerry Shannon at the U of M Department of Geography, and the Metropolitan Council Twin Cities Regional Travel Demand Model)

- Total number of medium to small grocery stores accessible within 30 minutes of transit travel time at midday (Source: USDA, Jerry Shannon at the U of M Department of Geography, and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of libraries accessible within 20 minutes of drive time during AM rush hour (Source: Minnesota Department of Education and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of libraries accessible within 30 minutes of transit travel time at midday (Source: Minnesota Department of Education and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of places of worship accessible within 20 minutes of drive time during AM rush hour (Source: Metropolitan Council Community Development Landmarks database and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of places of worship accessible within 30 minutes of transit travel time at midday (Source: Metropolitan Council Community Development Landmarks database and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of social service centers accessible within 20 minutes of drive time during AM rush hour (Source: Minnesota Council of Nonprofits and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of social service centers accessible within 30 minutes of transit travel time at midday (Source: Minnesota Council of Nonprofits and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of workforce centers accessible within 20 minutes of drive time during AM rush hour (Source: DEED, Minnesota Council of Nonprofits and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of workforce centers accessible within 30 minutes of transit travel time at midday (Source: DEED, Minnesota Council of Nonprofits and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of shopping centers accessible within 20 minutes of drive time during AM rush hour (Source: Metropolitan Council Community Development Landmarks database and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Total number of shopping centers accessible within 30 minutes of transit travel time at midday (Source: Metropolitan Council Community Development Landmarks database and the Metropolitan Council Twin Cities Regional Travel Demand Model)
- Park and open space accessible land as a percentage of total land area (Source: Metropolitan Council)