University of Minnesota Law School Scholarship Repository

Studies

Institute on Metropolitan Opportunity

2006

Commuting Patterns, Minority Suburbanization in Twin Cities

Myron Orfield University of Minnesota Law School

Thomas Luce

Follow this and additional works at: http://scholarship.law.umn.edu/imo_studies Part of the Law Commons

Recommended Citation

Myron Orfield & Thomas Luce, Commuting Patterns, Minority Suburbanization in Twin Cities (2006).

This Article is brought to you for free and open access by the University of Minnesota Law School. It has been accepted for inclusion in Studies collection by an authorized administrator of the Scholarship Repository. For more information, please contact lenzx009@umn.edu.

Access to Growing Job Centers in the Twin Cities Metropolitan Area 2000

Myron Orfield Thomas Luce Institute on Race and Poverty University of Minnesota

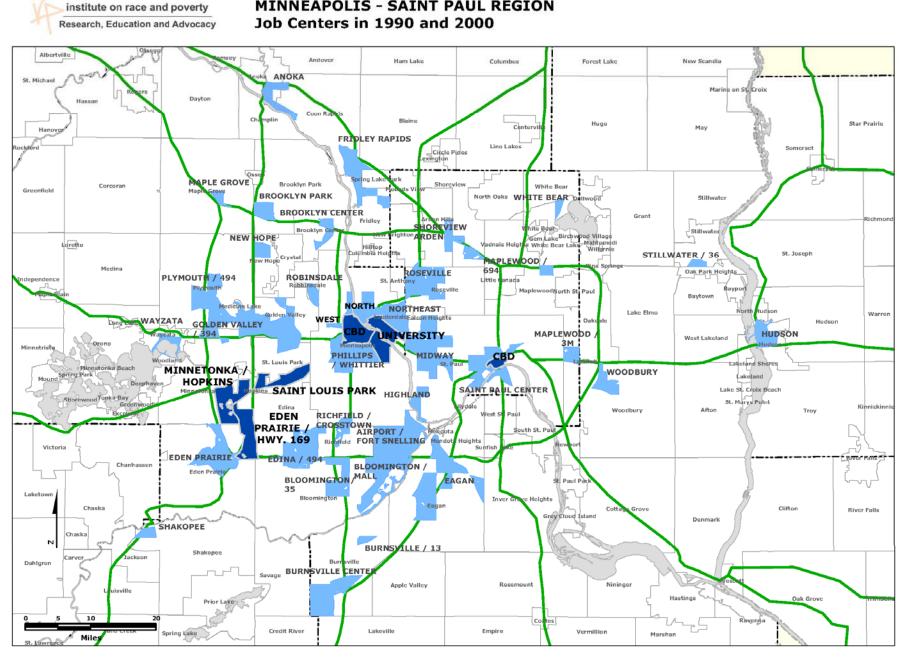
Introduction

Important trends in the Twin Cities affecting access to jobs for minority populations

- Continuing decentralization of jobs and population
- Increasing traffic congestion, especially in suburban areas where jobs are growing most quickly

Twin Cities Job Centers

- Defined as contiguous Traffic Analysis Zones (TAZ's) with greater than average numbers of jobs per square mile.
 Large job agglomerations like those in the centers of Minneapolis and St. Paul were divided into components based on job densities.
- This yielded 41 employment centers. (See map and table following two pages.)
- Job centers are scattered across the region but are more likely to be in the western and southwestern parts of the region. They range in size from 140,000 to 1,100 jobs in 2000.



MINNEAPOLIS - SAINT PAUL REGION

Source: U.S. Census Transportation Planning Package

Table 1: Job Growth and Industry Mix

							F	Percentage	Distributio	on		
Employment Center	Total Jobs 2000	Total Jobs 1990	% Grwth 1990-2000	Jobs per <u>Sq. Km.</u>	Man.	Trade	FIRE	Prof. Services	Educ. Services	Other	Public Admin	Other
Linployment Center	2000	1330	1330-2000	<u>oq. nn.</u>	<u>ivian.</u>	Trade			<u>Dervices</u>	<u>Dervices</u>	AMININ	
Minneapolis CBD	140,930	128,395	10	20,427	5	9	20	24	10	10	6	16
Edina	53,490	43,963	22	4,121	12	19	19	19	13	11	0	7
St. Paul - Midway	48,245	43,163	12	2,669	17	14	5	13	29	8	3	12
St. Paul Center	45,150	40,402	12	4,505	9	4	10	6	32	9	19	10
Golden Valley - I-394	43,710	40,913	7	2,071	22	17	18	16	8	9	0	11
Minneapolis - University of MN	42,645	48,276	-12	4,771	8	6	3	5	57	10	2	9
St. Paul CBD	38,140	40,278	-5	23,491	7	4	24	14	10	8	18	14
Eden Prairie - Hwy 169	33,730	23,002	47	3,931	24	24	14	16	8	5	0	9
Minneapolis - Phillips / Whittier	29,305	33,361	-12	2,518	6	10	5	7	44	18	2	8
Roseville	26,580	23,080	15	2,416	16	24	5	13	11	11	3	16
Eagan	25,715	19,466	32	1,369	15	16	15	14	6	8	0	26
Plymouth - I-494	25,255	19,088	32	2,332	30	16	9	23	7	6	0	8
Airport / Ft. Snelling	24,415	12,769	91	1,560	2	3	1	2	13	4	4	71
Bloomington - MOA	21,080	30,870	-32	1,715	8	18	15	17	9	15	2	16
Fridley / Coon Rapids	21,005	14,524	45	2,099	44	19	2	7	14	7	0	7
Minneapolis - Northeast	19,900	14,301	39	3,437	28	19	3	10	7	7	0	26
Bloomington - I-35W	19,765	17,407	14	2,902	27	24	7	11	6	9	0	16
St. Louis Park	17,905	13,604	32	2,889	21	22	4	8	29	8	0	10
Eden Prairie - ??	14,715	11,335	30	1,347	28	23	7	11	9	10	1	10
Minnetonka / Hopkins	14,000	10,947	28	1,516	35	19	9	10	6	5	1	14
Minneapolis - North	11,530	11,351	2	1,882	29	14	5	7	20	12	1	11
Shoreview / Arden Hills	11,475	9,196	25	2,225	50	11	6	17	4	5	2	5
Burnsville Center	9,940	7,280	37	909	16	33	3	4	20	15	0	8
Anoka	8,995	9,516	-5	1,948	18	5	4	4	41	7	13	9
Maplewood - 3M	8,855	9,674	-8	3,618	70	2	1	20	1	1	1	4
Brooklyn Park	8,755	4,831	81	2,634	33	27	4	12	4	9	1	11
Brooklyn Center	8,660	8,756	-1	3,022	18	28	12	7	7	17	3	10
Highland	5,140	3,294	56	1,764	36	10	8	3	26	11	0	6
New Hope	4,325	4,430	-2	1,831	45	14	1	7	19	4	1	10
Maplewood - I-694	3,875	2,693	44	2,757	1	42	4	3	30	16	1	3
Stillwater - Hwy 36	3,860	2,074	86	3,066	31	20	6	10	11	14	3	5
Robbinsdale	3,815	3,918	-3	1,938	2	4	2	1	86	2	0	3
Woodbury	3,805	1,315	189	929	3	31	35	4	8	12	0	7
Richfield - Crosstown	3,260	4,252	-23	1,184	4	37	3	7	12	11	1	25
Wayzata	3,175	2,609	22	1,633	4	22	24	26	3	15	2	5
Hudson WI	2,980	4,890	-39	620	9	19	14	9	20	13	2	14
Maple Grove	2,815	283	895	1,943	2	45	12	3	5	28	1	4
Burnsville - Hwy 13	2,305	2,560	-10	2,150	13	21	2	15	13	7	1	28
Minneapolis West	1,405	1,008	39	2,114	7	32	4	18	13	12	3	10
Shakopee	1,400	6,340	-78	778	11	7	1	4	12	8	40	17
White Bear Lake	1,140	2,539	-55	1,078	0	4	1	3	54	20	8	10
	017.105	704.055	10	0	10					•		
Total	817,190	731,953	12	2,894	16	14	11	14	17	9	4	14

Job Growth and Race of Workers by Type of Job Center

- Employment centers were grouped into five categories Central Business Districts; Other Central City Centers; Inner Suburbs; Middle Suburbs; and Outer Suburbs
- In 2000, 25% of regional jobs were in the two central city categories, down from 29% in 1990. The share of jobs in the 3 suburban categories was 25% in both years. The share outside of job centers increased from 46% to 50%.
- Job center growth rates increased with distance from the core of the region and the number of jobs outside of job centers grew more quickly than in any of the job center categories. Jobs were decentralizing and becoming more diffused.

Job Growth and Race of Workers by Type of Job Center

- In 2000, Black workers were far more likely to work in the central cities than other population groups: 41% of Blacks worked in the 2 central city categories compared to 24% for Whites, 30% for Hispanics and 33% for other races.
- Black workers were less likely than any other group to work in middle suburb job centers, outer suburb job centers or areas outside of job centers – the types of job centers that were growing most rapidly.

Employment Center Type	<u>Number</u>	Total Jobs <u>2000</u>	Percentage <u>of Regional Jobs</u>	Total Jobs <u>1990</u>	Percentage <u>of Regional Jobs</u>	% Grwth <u>1990-2000</u>
Central Bus. Districts	2	179,070	11	168,673	13	6
Other Central City Centers	9	227,735	14	207,925	16	10
Inner Suburb	12	204,235	13	174,638	13	17
Middle Suburb	11	180,795	11	151,434	11	19
Outer Suburb	4	19,835	1	15,514	1	28
Total - Employment Ctrs.	38	811,670	50	718,184	54	13
Non-clustered Employment		816,810	50	621,084	46	32
Total - Metropolitan Area		1,628,480	100	#########	100	22

Table 2: Job Growth and Racial Breakdowns by Type of Employment Center

_	Racial Br	eakdown of V	Vorkers in	2000	Perce	als		
	No	n-Hispanic			Nor	n-Hispanic		
Employment Center Type	<u>White</u>	<u>Black</u>	<u>Other</u>	<u>Hispanic</u>	<u>White</u>	<u>Black</u>	<u>Other</u>	<u>Hispanic</u>
Central Bus. Districts	85	6	5	3	11	19	13	12
Other Central City Centers	84	6	7	4	13	22	20	18
Inner Suburb	89	3	5	3	12	12	14	12
Middle Suburb	88	3	6	3	11	10	13	11
Outer Suburb	95	1	2	1	1	0	1	1
Total - Employment Ctrs.	87	5	6	3	48	63	61	55
Non-clustered Employment	91	3	4	2	52	37	39	45
Total - Metropolitan Area	89	4	5	3	100	100	100	100

Job Growth and Race of Workers by Job Center Growth Rates

- Job centers were grouped into 4 categories based on 1990-2000 growth rates: Declining centers (job losses during the decade); Slow Growth centers (growth between 0 and 20%); Moderate Growth centers (growth between 20 and 40%); and High Growth centers (growth more than 40%).
- In 2000, Black workers were far more likely to work in declining or slow growth centers than other workers: 47% of Black workers compared to 30% of Whites, 37% of Hispanics and 39% of Other races.

					Racial Breakdown of Workers				Percentage of Regional Total				
		Total Jobs	Total Jobs	% Grwth	Nor	n-Hispanic			No	n-Hispanic			
Employment Center Type	<u>Number</u>	<u>2000</u>	<u>1990</u>	<u>1990-2000</u>	White	<u>Black</u>	<u>Other</u>	<u>Hispanic</u>	<u>White</u>	<u>Black</u>	<u>Other</u>	<u>Hispanic</u>	
Declining Employment	11	171,385	195,891	-13	84	5	7	3	10	16	15	14	
Slow Growth (0 - 20%)	7	335,910	304,711	10	86	5	6	3	20	31	24	23	
Moderate Growth (20 - 40%)) 11	196,975	152,797	29	88	3	6	3	12	11	14	12	
High Growth (> 40%)	9	107,400	64,785	66	89	3	5	2	7	6	7	6	
Total - Employment Ctrs.	38	811,670	718,184	13	87	5	6	3	48	63	61	55	
Non-clustered Employment		816,810	621,084	32	91	3	4	2	52	37	39	45	
Total - Metropolitan Area		1,628,480	1,339,268	22	89	4	5	3	100	100	100	100	

Table 3: Job Growth and Racial Breakdowns by Employment Growth Rates

Commuter-shed Analysis

- Journey-to-work data compiled at the Traffic Analysis Zone (TAZ) level by the 1990 and 2000 Census Transportation Planning Packages was used to analyze commuting patterns into the 22 largest job centers.
- Data for travel time from every TAZ to every other TAZ was used to derive the areas around each job center representing 0-20 minute, 20-30 minute, 30-40 minute and > 40 minute commutes into the centers.
- The characteristics of the population residing within each type of commuter shed were derived by overlaying the commuter-sheds on 2000 Census data.

Commuter-shed Analysis

• Four examples are shown on the following pages: the Minneapolis CBD, the University of Minnesota job center (located within Minneapolis), the St. Louis Park job center (a moderate income inner suburb) and the Eden Prairie job center (a high income middle suburb).

Commuter-shed Analysis: General Patterns

- The farther the job center is from the core of the region, the less accessible the center is to affordable housing, lower income people and people of color. (Affordable housing rates are highest closest to the Minneapolis CBD and the University of Minnesota center, in the 20-30 minute commuting zone in St. Louis Park, and in the 30-40 minute commuting zone in Eden Prairie.
- Commuting zones are larger for suburban centers than urban centers in both years, reflecting greater congestion in the core.

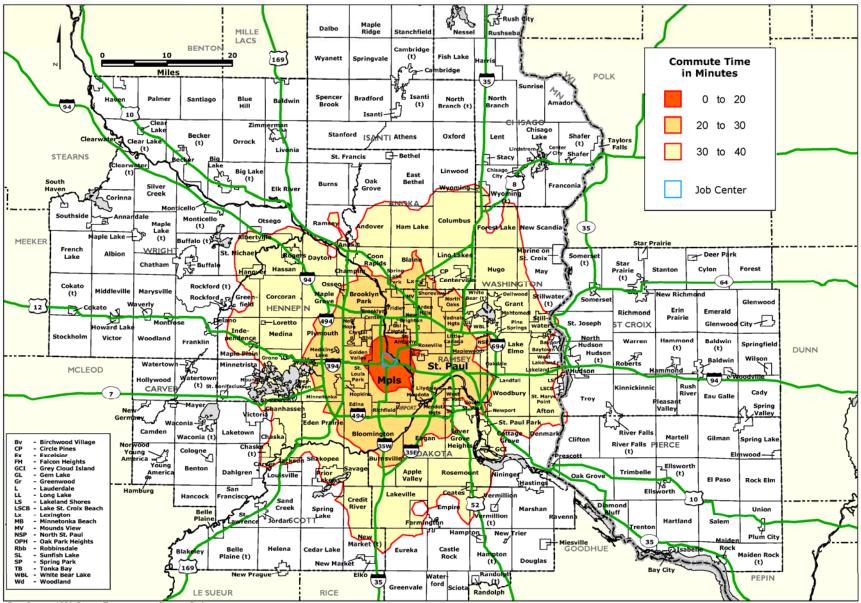
Commuter-shed Analysis: General Patterns

- Commuter-sheds shrunk during the 1990's everywhere, reflecting growing traffic congestion. Prior work showed that commuter-sheds increased in size during the 1980's when congestion levels were significantly lower.
- Commuter-shed shrinkage was proportionately greater in suburban job centers. Commuter-sheds were much more similar (urban versus suburban) in 2000 than in 1990. The implication is that congestion increased more rapidly in the suburbs, making access from the core more difficult.

Minneapolis Central Business District	<u>2000</u>
Jobs	140,930
Job Growth 1990-2000	10%
Percentage of Housing Affordable to a Household at 50% or less of the Regional Median Income	
0-20 Minute Commutershed 20-30 Minute Commutershed 30-40 Minute Commutershed	55% 30% 18%
Racial Breakdown	
0-20 Minute Commutershed White Black Other	61% 18% 21%
20-30 Minute Commutershed White Black Other	78% 8% 14%
Median Household Income	
0-20 Minute Commutershed 20-30 Minute Commutershed 30-40 Minute Commutershed	\$48,849 \$64,084 \$76,710
Poverty %	
0-20 Minute Commutershed 20-30 Minute Commutershed 30-40 Minute Commutershed	22% 8% 4%



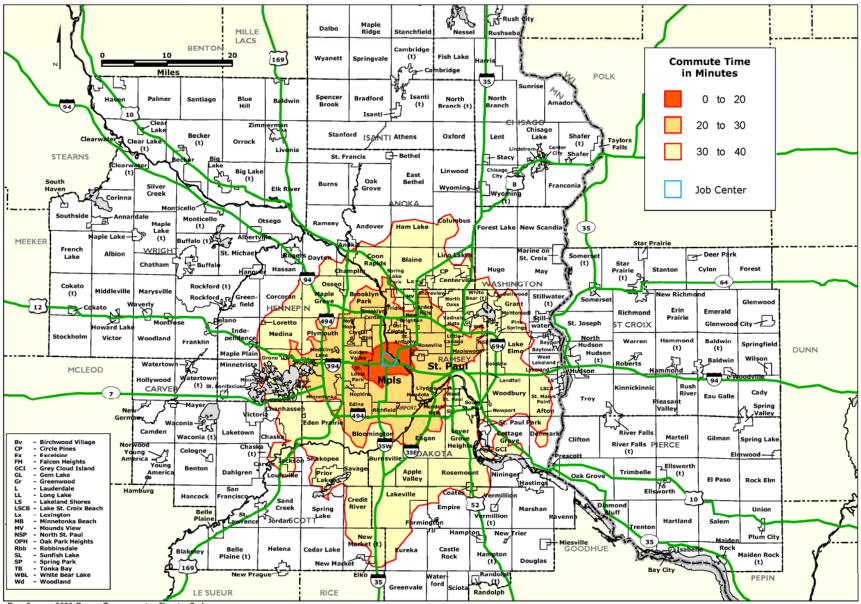
Minneapolis Central Business District Employment Center 1990 Commuter-Shed



Data Source: 1990 Census Transportation Planning Package.



Minneapolis Central Business District Employment Center 2000 Commuter-Shed

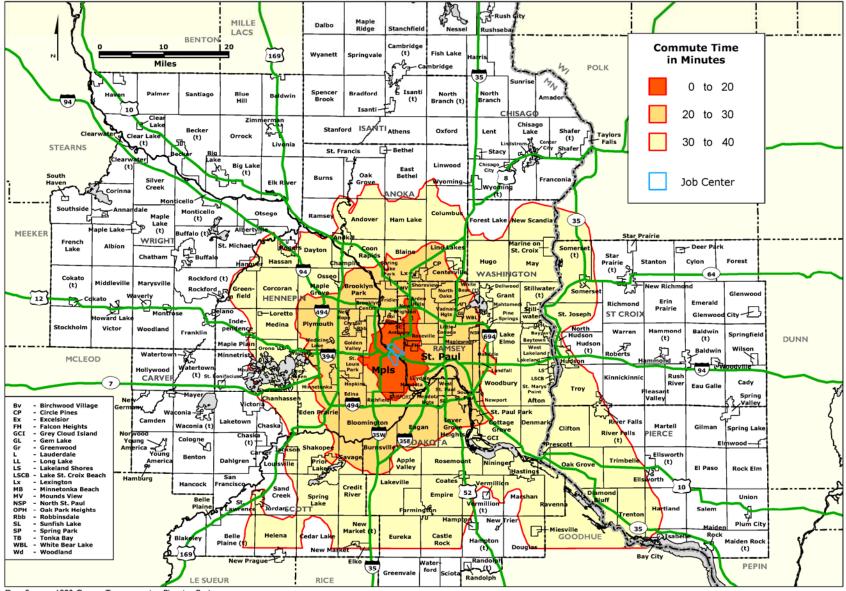


Data Source: 2000 Census Transportation Planning Package.

University of Minnesota	<u>2000</u>
Jobs	42,645
Job Growth 1990-2000	-12%
Percentage of Housing Affordable to a Household at 50% or less of the Regional Median Income	
0-20 Minute Commutershed 20-30 Minute Commutershed 30-40 Minute Commutershed	50% 30% 14%
Racial Breakdown	
0-20 Minute Commutershed White Black Other	66% 14% 20%
20-30 Minute Commutershed White Black Other	79% 7% 14%
Median Household Income	
0-20 Minute Commutershed 20-30 Minute Commutershed 30-40 Minute Commutershed	\$50,410 \$63,309 \$81,550
Poverty %	
0-20 Minute Commutershed 20-30 Minute Commutershed 30-40 Minute Commutershed	22% 8% 4%



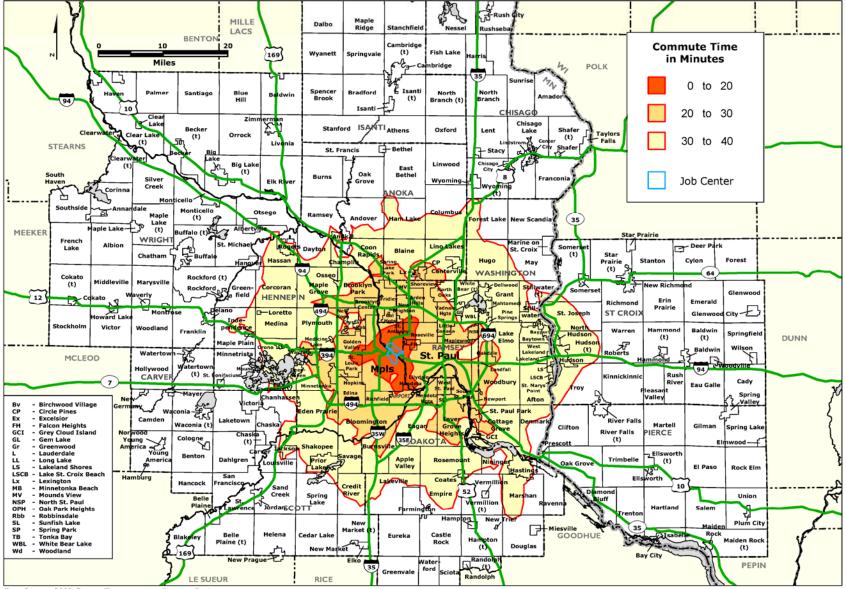
University Employment Center 1990 Commuter-Shed



Data Source: 1990 Census Transportation Planning Package.



University Employment Center 2000 Commuter-Shed

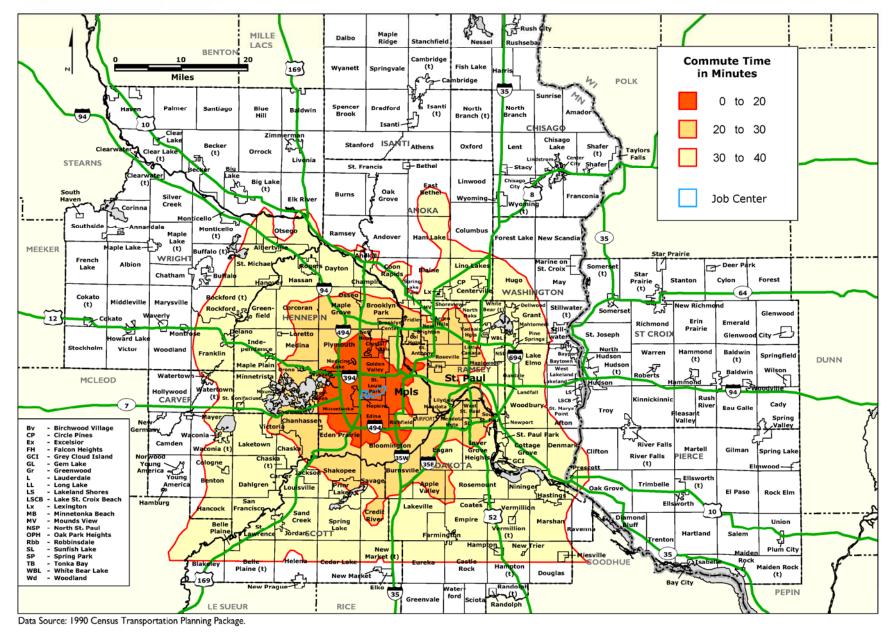


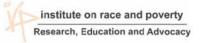
Data Source: 2000 Census Transportation Planning Package.

<u>St. Louis Park</u>	<u>2000</u>
Jobs	17,905
Job Growth 1990-2000	32%
Percentage of Housing Affordable to a Household at 50% or less of the Regional Median Income	
0-20 Minute Commutershed 20-30 Minute Commutershed 30-40 Minute Commutershed	17% 32% 23%
Racial Breakdown	
0-20 Minute Commutershed White Black Other	87% 5% 8%
20-30 Minute Commutershed White Black Other	78% 9% 13%
Median Household Income	
0-20 Minute Commutershed 20-30 Minute Commutershed 30-40 Minute Commutershed	\$79,523 \$64,038 \$69,638
Poverty %	
0-20 Minute Commutershed 20-30 Minute Commutershed 30-40 Minute Commutershed	22% 8% 4%

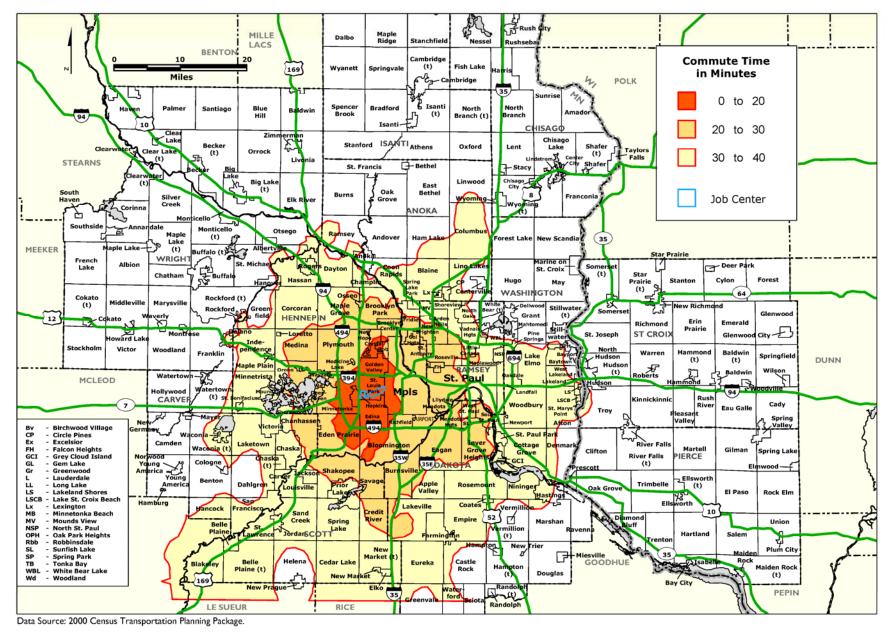


Saint Louis Park Employment Center 1990 Commuter-Shed

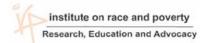




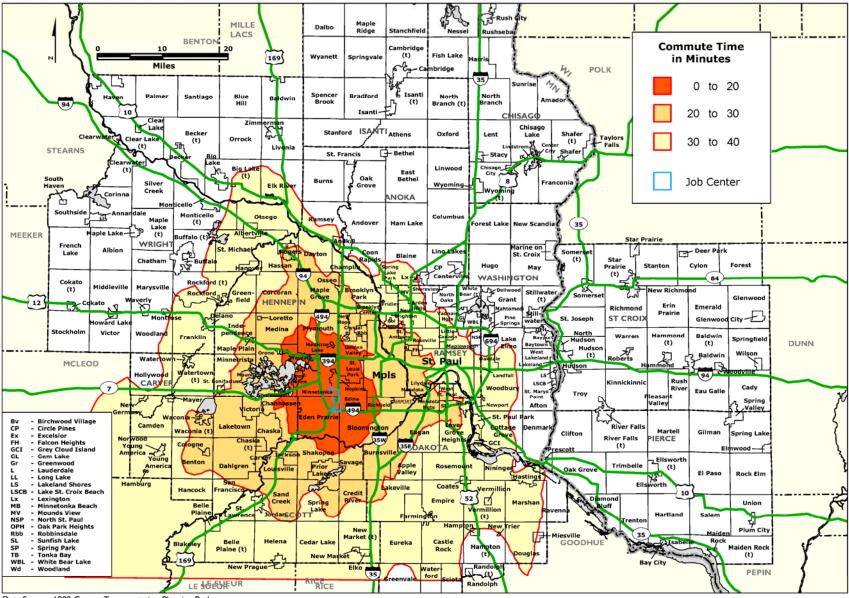
Saint Louis Park Employment Center 2000 Commuter-Shed



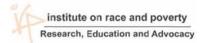
<u>Eden Prairie - 169</u>	<u>2000</u>
Jobs	33,730
Job Growth 1990-2000	47%
Percentage of Housing Affordable to a Household at 50% or less of the Regional Median Income	
0-20 Minute Commutershed 20-30 Minute Commutershed 30-40 Minute Commutershed	13% 27% 32%
Racial Breakdown	
0-20 Minute Commutershed White Black Other	90% 3% 7%
20-30 Minute Commutershed White Black Other	79% 9% 12%
Median Household Income	
0-20 Minute Commutershed 20-30 Minute Commutershed 30-40 Minute Commutershed	\$83,821 \$70,045 \$61,276
Poverty %	
0-20 Minute Commutershed 20-30 Minute Commutershed 30-40 Minute Commutershed	22% 8% 4%



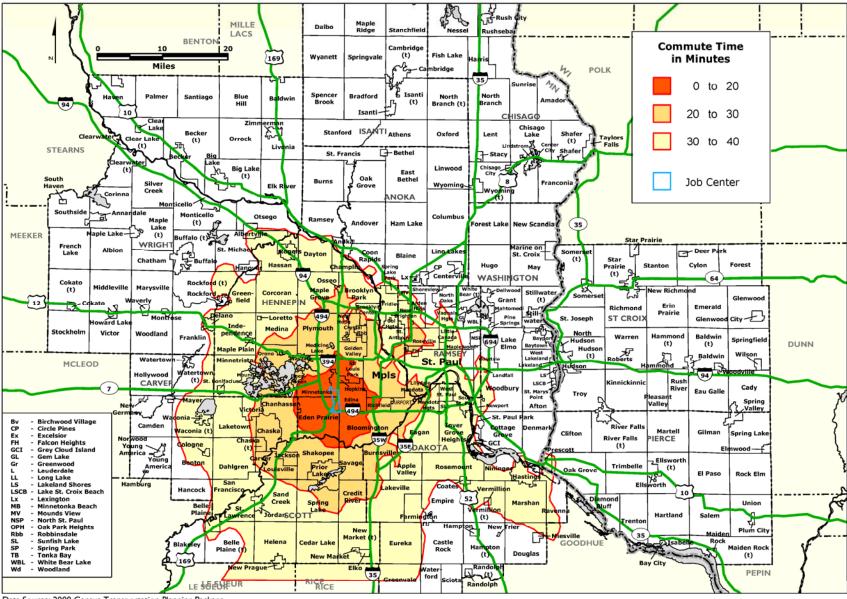
Eden Prairie / 169 1990 Commuter-Shed



Data Source: 1990 Census Transportation Planning Package.



Eden Prairie / 169 2000 Commuter-Shed



Data Source: 2000 Census Transportation Planning Package.

Patterns in the 22 Largest Job Centers by Type of Center

- Greater likelihoods of living near the core of the region give Black and Hispanic residents greater average access to the 22 largest job centers. On average, 15% of the region's Black residents reside within a 20 minute commute of these centers, compared to 14% for Hispanics and 10% for Whites.
- Whites are also much more likely to live far from these centers. On average 24% of Whites live more than 40 minutes away compared to just 4% for Blacks and 9% for Hispanics.

Patterns in the 22 Largest Job Centers by Type of Center

- However, access rates for people of color drop dramatically for job centers farther from the core. On average, just 8% of Blacks live within 20 minutes of middle suburban job centers compared to 11% of Whites and 10% of Hispanics.
- When the analysis is complete for all 41 employment centers, the overall advantages for Blacks and Hispanics are likely to decline because centers farthest from the core tend to be smaller and growing more quickly than average.

		Total Jobs	Total Jobs	% Grwth	Population Within a 20 min. Commute Non-Hispanic				Population Within a 20-30 min. Commute Non-Hispanic				
Employment Center Type	<u>Number</u>	2000	<u>1990</u>	<u>1990-2000</u>	White	Black	Other	<u>Hispanic</u>	White	Black	<u>Other</u>	<u>Hispanic</u>	
Central Bus. Districts	2	179,070	168,673	6	65	13	14	8	79	8	9	4	
Other Central City Centers	7	221,190	203,623	9	74	10	11	6	79	8	9	5	
Inner Suburb	5	162,690	136,084	20	81	7	8	3	78	8	9	4	
Middle Suburb	8	165,735	141,311	17	87	4	6	3	78	8	9	5	
Average for all Job Ctrs.	22	728,685	649,691	12	80	7	9	4	78	8	9	5	

Table 4: Job Growth and Racial Breakdowns by Type of Employment Center (22 Largest Centers)

	Percentag	e of Regional	Percentag	e of Region	al Black Po	pulation	Percentage of Regional Hispanic Population					
	Within 20 <u>Minutes</u>	20-30 <u>Minutes</u>	30-40 <u>Minutes</u>	> 40 <u>Minutes</u>	Within 20 <u>Minutes</u>	20-30 <u>Minutes</u>	30-40 <u>Minutes</u>	> 40 <u>Minutes</u>	Within 20 <u>Minutes</u>	20-30 <u>Minutes</u>	30-40 <u>Minutes</u>	> 40 <u>Minutes</u>
Central Bus. Districts	7	31	37	24	23	51	23	3	22	42	27	9
Other Central City Centers	9	37	33	20	20	60	17	2	18	54	21	7
Inner Suburb	11	34	32	23	16	60	21	3	12	49	31	8
Middle Suburb	11	30	31	29	8	52	33	6	10	47	32	11
Average for all Job Ctrs.	10	33	32	24	15	56	25	4	14	49	28	9

Patterns in the 22 Largest Job Centers by Job Center Growth Rates

- Similar patterns appear when job centers are grouped by growth rates. Black and Hispanic residents are much more likely to live near declining or slow growth centers than are whites but less likely to live near moderate and high growth centers.
- When the analysis is complete for all 41 employment centers, the overall advantages for Blacks and Hispanics are likely to decline because centers farthest from the core tend to be smaller and growing more quickly than average.

					Population	Within a 2	nmute	Population Within a 20-30 min. Commute				
	Number of	Total Jobs	Total Jobs	% Grwth	Non	-Hispanic			Nor	n-Hispanic		
Employment Center Type	<u>Centers</u>	<u>2000</u>	<u>1990</u>	<u>1990-2000</u>	White	Black	Other	<u>Hispanic</u>	<u>White</u>	Black	Other	<u>Hispanic</u>
Declining Employment	4	131,170	152,785	-14	73	10	10	7	79	8	9	4
Slow Growth (0 - 20%)	7	335,910	304,711	10	75	10	11	5	79	8	9	5
Moderate Growth (20 - 40%) 8	182,455	141,900	29	85	5	7	3	78	8	9	5
High Growth (> 40%)	3	79,150	50,295	57	86	4	7	3	77	9	10	5
						_	_			_	_	_
Average for all Job Ctrs.	22	728,685	649,691	12	80	7	9	4	78	8	9	5

Table 5: Racial Breakdowns by Employment Growth Rates - 22 Largest Job Centers

_	Percentag	e of Regional	White Popu	lation	Percentag	e of Region	al Black Po	oulation	Percentage of Regional Hispanic Population			
_	Within 20	20-30	30-40	> 40	Within 20	20-30	30-40	> 40	Within 20	20-30	30-40	> 40
	<u>Minutes</u>	<u>Minutes</u>	<u>Minutes</u>	<u>Minutes</u>								
												_
Declining Employment	10	33	35	22	21	53	23	3	23	47	23	7
								2				
Slow Growth (0 - 20%)	10	36	32	23	21	57	19	3	15	53	24	8
Madavata Orauth (00 40%)	44	20	24	00	40	50	20	F	40	40	24	40
Moderate Growth (20 - 40%)	11	32	31	26	10	56	29	5	10	49	31	10
High Growth (> 40%)	12	30	33	25	9	58	28	4	11	45	35	10
High Growin (> 40%)	12	30	33	20	9	00	20	4	11	40	30	10
Average for all Job Ctrs.	10	33	32	24	15	56	25	4	14	49	28	9
Average for all Job Cirs.	10	33	32	24	15	96	25	4	14	49	20	9

Conclusions

The continuing decentralization and diffusion of jobs in the Twin Cities metropolitan area resulted in decreasing opportunities for Black and Hispanic workers because:

- Black and Hispanic workers are more likely to work in slower growing job centers in the core of the region.
- Black and Hispanic households are less likely to live in areas closest to the fastest growing job centers in middle suburbs and at the periphery of the region.