Women, Work, and the City

by Elvin K. Wyly

The shape of the city we see around us reflects the complexity of the relationship between home and work. The ways in which women and men find places to live and work, and the ways in which employers choose to locate or expand operations at different sites, all interact to shape the spatial structure of neighborhoods and workplaces in the metropolis. Once laid out on the landscape, this spatial form then becomes yet another factor influencing the alternatives and constraints facing individual people. Changes in the intricate webs of spatial interaction traced across our city streets and highways ultimately mirror broader social and economic trends.

One of the most sweeping changes in the link between home and work has been the increase in female labor force participation since the Second World War. In 1950, fewer than one in three American women were in the workforce; over the next forty years, this figure doubled. In recent years, scholarly and popular accounts have alerted us to the implications of this trend for changes in family structure, household incomes, and the relations between formal (paid) employment and domestic (unpaid) work. Yet we often forget that these changes have also reshaped the geography of home and work inside metropolitan regions.

This study examines the geographical dimensions of women’s employment in the Twin Cities metropolitan area. How do women’s travel patterns differ from those of men, and what does this imply? How do the locations of women’s jobs differ from those of men?

To answer these questions, I conducted a study of gender differences in employment and travel in the Twin Cities area, a region with one of the nation’s highest female labor force participation rates. To balance the need for information that has a detailed “social resolution” (variations among different groups of workers) with the need for detailed spatial information, I drew on two large datasets assembled for the 1990 census.

For a rich supply of information on workers and households I used the Public-Use Microdata Samples or “PUMS” files, which provide individual responses to the census questionnaire for 5 percent of the entire population. For this study, I focused on dual-earner, married-couple families, since women’s employment in these households presents some of the most serious challenges to conventional wisdom.” The final sample includes some 8,000 households representing an estimated 450,000 workers—a third of the region’s workforce.

The PUMS provide relatively little spatial information, however, and so analyzing differences in where men and women work requires a different dataset. I used the Census Transportation Planning Package or “CTPP,” a custom tabulation of travel-related subjects that provides information on workers by place of residence and by place of work. This underserved dataset provides a rich source of information on local labor markets, and its unparalleled spatial resolution is well-suited for an analysis of neighborhood variations in men’s and women’s work.

Women Work Closer to Home Than Men

One of the most recurrent observations in urban commuting studies is a persistent gender gap in work travel. Dozens of studies have uncovered this finding, in settings ranging from smallish industrial towns in New England to large metropolitan regions in Europe, Canada, and the United States. Typically, the gap between men’s and women’s average work trips is only 15 percent or so, depending on how we measure the work journey (travel time, straight-line distance between home and work, or actual road distance). Standard census tabulations usually underestimate gender differences, however, because time spent dropping off children at school or daycare (most often done by women) is counted as part of the commute.

While a 15 percent difference may seem irrelevant, the persistence of this gap has far-reaching implications. The gender gap has been shown to reflect broader social and economic factors: women earn less than men (even within the same job categories), thus making long commutes difficult to justify; and despite occasional sightings of the elusive “New Age Man,” women still bear primary responsibility for housekeeping and child care.

Some feminist geographers thus conclude that the gender gap in travel may be

*We tend to label families “working class” or “middle class,” for example, according to what the breadwinner (usually the man) does for a living. Dual-earner families complicate this conventional interpretation. What social class is a family in which the man works as a lawyer and his wife works as a low-paid secretary in an insurance office? Or a family in which the man works as a welder and his wife works as a supervisor in a small office?*
The aggregate gender difference in travel also conceals wide variations across different parts of the metropolitan area. To illuminate these patterns, we can calculate the gender gap—the average travel time of husbands minus that of wives—for roughly a dozen subareas of the metropolitan region. We can then analyze the spatial variation in the gender gap in three ways (Figure 1). First, we can calculate the gap between husbands and wives by place of residence. The average difference in work trips of dual-earner families living in Minneapolis is roughly one and one-half minutes, for example. The results of this calculation are shown in the white bars in Figure 1. Second, we can classify dual-earner families according to where the husbands work, and then calculate the gender gap between these men and their wives (regardless of where the wives work). Husbands working in Minneapolis travel an average of four and one-half minutes longer than their wives (many of whom work in suburban areas close to home). The results of this calculation are shown in the light gray bars in Figure 1. Finally, we can classify dual-earner families according to where the wives work. Wives working in Minneapolis travel almost two minutes longer than their husbands. This classification would describe the situation of a family in the western suburbs in which the husband works in a nearby “edge city” office complex and the wife works in downtown Minneapolis. The results of this calculation are shown in the dark gray bars.

While women’s and men’s social roles have changed a great deal in the past two generations, substantial differences persist. In most families, women are still responsible for shopping, child care, and other domestic chores. For working women, often confined to low-paying jobs, the daily challenge is juggling home and work. Women work closer to home than men, and this affects regional travel patterns, labor markets, and the way we perceive the city.

Since the use of travel time as a measure of home-work separation is biased among carpools and transit users, we focus here only on those workers driving “solo” in private automobiles.
in Figure 1. In the case of Minneapolis the calculation yields a negative number, so the bar falls below the horizontal line representing equal work trips among husbands and wives.

This procedure demonstrates that the magnitude of the gender gap in work travel depends critically on where we measure it. The overall gap of three minutes for the entire metropolitan area conceals wide variations created by the complex webs of commuting that link different neighborhoods in the region. By place of residence, the gap varies from less than two minutes in Minneapolis, Bloomington, and Richfield, to nearly six minutes as we go farther from the job-rich central cities and well-developed southwest suburbs (Figure 1).

This pattern is reversed when we examine husbands at their place of work. The gender gap in these families decreases as we go farther from the central cities and dense suburbs (Figure 1). Many of the husbands working in the large job concentrations in the central cities live in distant residential suburbs, where their wives work locally. By contrast, many of the husbands working in the outlying suburbs live on the fringe of the metropolitan area, and both spouses in these families spend similar times on the road.

Classifying dual-earner families according to where the wives work provides the most striking results (Figure 1). Wives working in Minneapolis travel slightly longer than their husbands, but in many of the region’s low-density suburbs the gender gap widens to eight minutes or more. Wives who work in northern Anoka County are particularly locally-oriented in relation to their husbands: the gender gap for these families is more than fifteen minutes. In these neighborhoods, wives typically work in local service or retail firms, while their husbands devote forty-five minutes or an hour to the drive into Minneapolis or St. Paul.

How do these patterns relate to the idea of spatial entrapment suggested by smaller case studies of specific neighborhoods? Consider the differences in commuting among women in different parts of the Twin Cities. If we wish to explore gender relations in rapidly-growing, affluent suburbs, we can focus on men and women living in the southwest enclaves of Eden, Minnetonka, and Eden Prairie. Analysis of these households reveals wide gender differences in income and part-time work, but with little corresponding difference in commuting. Husbands’ hourly wages exceed those of their wives by more than six dollars, corresponding to a gap of nearly $25,000 in annual income; yet the gender gap in the worktrip is less than three minutes (Figure 1). Moreover, wives employed in “typical,” female-dominated clerical and secretarial occupations commute about the same distance as women in other lines of work (after adjusting for income, education, and part-time work). Studies in this kind of job-rich neighborhood would find only weak support for the idea that the gender gap in travel is an indicator of gender roles.

Now consider families living twenty miles to the north, in the diffuse, low-density labor markets of Anoka, Coon Rapids, and Columbia Heights. A sample of these families again reveals wide differences between husbands and wives: men earn about $5.50 per hour more than their wives, most of whom work less than full-time. The gender gap in commuting is also relatively large, however, (over four minutes) and women employed in clerical and secretarial jobs report trips five minutes shorter than women in other occupations (after adjusting for income, education, and part-time work). In many of these families, husbands remain the primary breadwinner, and wives’ employment is viewed as secondary to the family budget; thus women face strong incentives to limit the time and expense of the job search and the daily commute. In turn, this restricted mobility may present an attractive factor to certain firms in need of a large supply of part-time, lower-wage workers.

Finally, consider the circumstances of wives working in the diffuse labor markets of northern Anoka County. As in most other areas of the Twin Cities, wives commuting to jobs here typically earn less than their husbands, and are likely to work part-time or in low-wage clerical or service jobs. In contrast to other areas, however, here we find remarkably large gender gaps in work travel: husbands’ trips exceed those of their wives by more than 15 minutes. This figure represents three-quarters of the average commute for the entire regional workforce, and we can easily discern the implications of this simple empirical pattern. With husbands’ and wives’ workplaces so far away from one another, certain kinds of household arrangements and sharing of household tasks become more difficult. Information on potential job opportunities (which workers often obtain from other employees at the workplace) becomes more locally-oriented for women. And households’ responses to changing transportation costs (fuel costs, gas taxes, and congestion pricing, for example) affect husbands’ and wives’ tradeoffs differently. Studies of women’s employment in this kind of area provide strong support for the idea that women’s shorter trips reflect (and perhaps reinforce) gender roles in work and family life.
Where do Women and Men Work?
The worktrip can only tell us so much about women's employment. We must also explore where the work journey begins and ends, at a relatively fine spatial scale. Is there a geography of women's and men's work corresponding to the differences in the kinds of work women and men do? It is well known that the kinds of jobs held by women are vastly different from those held by men. Some industries are heavily dominated by men—mining, manufacturing, transport, wholesale trade—while women are concentrated in service sectors. While the shift to a service- and information-intensive economy is slowly eroding gender differences between these sectors, deep divisions remain within industrial sectors.

Men (particularly White men) continue to dominate high-paying, white-collar professional and executive positions, as well as skilled blue-collar trades (where unionization has historically maintained higher than average wages). By contrast, most women (and minorities) are confined to lower-status, poorly-paid jobs. Women are especially concentrated in occupations historically deemed to be suitable "women's work:" teaching, nursing, services, and clerical and secretarial jobs. Nearly one-third of all women in the Twin Cities work in a single category—administrative support. Interestingly, men predominated among record-keepers and other "administrative support" jobs when these positions provided relatively well-paid, stable careers. Early in this century, the voluminous paperwork generated by industrialization required a routinization of these jobs, which then became regarded as dead-end, temporary work for young women until marriage.

In addition to holding different kinds of jobs, women and men work in different places. To examine these patterns, we turn to the Census Transportation Planning Package. For the entire regional workforce (some 1.2 million workers) we can map residences and workplaces of women and men in different industries and occupations. First, we focus on total employment, mapping workplaces in which workers of one sex hold significantly more than half of all jobs (Figures 2, 3). We then scale circles according to the number of jobs held by each sex, adding progressively darker shades to show greater gender imbalances.

For men, local labor markets clearly delineate the region's industrial arteries (Figure 2). Male-dominated workplaces cluster heavily in the manufacturing and rail corridors of Northeast Minneapolis, St. Paul's Midway district, and along highways in the southern and western suburbs, where there are scores of manufacturing and transportation operations. Particularly in the web of rail yards and manufacturing centers in Northeast Minneapolis and the Midway, this map squares well with our mental maps. By and large, these are strongly masculine, blue-collar workplaces.

For women, jobs are much less concentrated, in keeping with women's shorter worktrips (Figure 3). Still, women make up the majority in a number of workplace zones. Without exception, these districts trace out the region's service, retail, and support functions. In the central cities, women make up the majority of workers in the health care cluster southeast of downtown Minneapolis, at the University of Minnesota, around 50th and France, and in downtown St. Paul. In the suburbs, large concentrations of working women highlight health care complexes (Anoka's Mercy Hospital, Fairview Southdale in Edina, and North Memorial in Robbinsdale) as well as educational facilities, regional shopping centers, and smaller retail concentrations.

These gender differences are even more striking across different industries and occupations. To compare the distributions of different kinds of jobs to the overall pattern of total employment, we calculate a simple location quotient (LQ) for each of 1,200 zones in the seven-county metropolitan area. For example, for each zone we calculate the share of the region's male manufacturing employees working there, divided by the share of all regional employment located in the zone. A resulting quotient of 2.0 would indicate that the zone has twice its share of male manufacturing employees compared to what we would expect given the distribution of total employment. If we perform this calculation for all workplaces and all residential zones for specific sectors of the economy, we can produce maps of the local labor markets for different segments of the workforce (Figures 4, 5).

* Since women's commutes are comparatively short, the spatial distribution of women's employment more closely approximates the dispersed distribution of workers' residences.

Figure 2. Male-Dominated Labor Markets* in the Twin Cities Area

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<th>CIRCLE SIZE</th>
<th>indicates number of jobs held by men.</th>
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<th>CIRCLE SHADING</th>
<th>indicates jobs held by men as a percent of total employment.</th>
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<td>67-69</td>
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* Workplace zones in which at least 55 percent of all jobs are held by men.

Local labor markets for men in manufacturing clearly partition the region along a broad industrial axis running from the southeast to the northwest (Figure 4). Men in manufacturing are disproportionately concentrated in scores of workplaces and residential neighborhoods tied to the historic imprint of the rail and river corridors and to newer highway-oriented enterprises. Interestingly, this map is a composite of two types of manufacturing: durable goods industries are clustered in a broad swath extending out of North Minneapolis and along major freeway corridors in the southwest suburbs; nondurable goods manufacturing (dominated by 3M and its suppliers) gravitates east of St. Paul, with additional concentrations in the Midway area and in Northeast Minneapolis.

The regional service economy incribes a strikingly different pattern (Figure 5). We only need a passing familiarity with the Twin Cities to recognize the rapid growth of finance, insurance, and real estate (the so-called "FIRE sector") as we drive through any of the affluent landscapes of the south and west suburbs. Men employed in this sector live in a broad swath of second-tier suburbs along freeway corridors, and work in nearby suburban complexes or in the concentrated string of financial operations stretching out of downtown Minneapolis towards Edina. Men in the FIRE sector generally live and work in entirely different locations from their counterparts in manufacturing. Again, these maps conform closely to our mental maps of different industries and occupations in different parts of the region.

For women, however, the structure of local labor markets suggests a seemingly paradoxical result. Mapping location quotients for the single largest category of women's employment—administrative support—produces a virtually empty map. Roughly 30 percent of all women work in this occupational category, and these jobs are distributed in almost precisely the same geographic pattern as total employment. No parts of the region have more than their share of women in this category. At any workplace—downtown Minneapolis or St. Paul, Roseville, Coon Rapids, or Eden Prairie—administrative support jobs account for about a fifth of total employment, and more than three-quarters of these jobs are held by women. Moreover, these low-status, mostly low-paying jobs constitute the single largest job category for women living in all kinds of neighborhoods—from the modest districts of the northern suburbs to the upper-middle class enclaves southwest of Minneapolis. While we tend to think of the social space of the city in terms of occupational class—"white collar" versus "blue collar"—the segregation of so many women into the "pink collar" workforce challenges us to re-think the gendered nature of social class in the contemporary city.

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While gender relations in American society have undergone many changes in the past generation, we should not lose sight of the durability of traditional ideas about women's and men's roles. These ideas persist in the workforce and in the family, and a growing number of researchers agree that the persistently shorter commutes of women reflect gender differences in the link between home and work. This gap can often be taken as a rough indicator of gender roles, but this relation varies widely across different neighborhoods. Thus the implications of women's different travel patterns—the suburbanization of jobs, travel demand trends, the range of opportunities women can find nearby—also diverge across the urban fabric. Moreover, differences in the kind of work women and men do are clearly observable in the fine-grained geographical patterns of local labor markets, as we have shown in the Twin Cities. While differences in industries and occupations of working men still conform to our traditional view of the city's "blue-collar" and "white-collar" neighborhoods, women from all kinds of neighborhoods remain segregated into the vast "pink-collar" workforce. These findings challenge the traditional ways in which we think of women, work, and the city.

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Figure 4. Twin Cities Area Labor Markets for Men in Manufacturing

WORKPLACES
with disproportionate shares of manufacturing jobs held by men.
Location * Circles size corresponds to level of over-representation.
Quotients 2.00 9.29

RESIDENTIAL ZONES
that house disproportionate shares of male manufacturing workers.
Location * Circles size corresponds to level of over-representation.
Quotients 1.50 or greater than 1.99


Figure 5. Twin Cities Area Labor Markets for Men in Finance, Insurance, and Real Estate

WORKPLACES
with disproportionate shares of manufacturing jobs held by men.
Location * Circles size corresponds to level of over-representation.
Quotients 2.00 14.40

RESIDENTIAL ZONES
that house disproportionate shares of male manufacturing workers.
Location * Circles size corresponds to level of over-representation.
Quotients 1.50 or greater than 1.99


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