



How to Use ETI Place-of-Work and Purchasing Power Drill Downs

Drill Downs for the Burleigh Main Street Project

prepared by

John Pawasarat
Lois M. Quinn
Frank Stetzer

Employment and Training Institute
School of Continuing Education
University of Wisconsin-Milwaukee

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Introduction

Commercial districts across the United States are attempting to expand retail activity and employment in targeted city neighborhoods. Many cities, non-profit agencies, and business entrepreneurs are seeking accurate, non-biased information on business activity and access of urban residents to needed goods and services. Equitable access to grocery stores offering reasonably priced and quality food, for example, is seen as both a quality of urban life issue and a health concern, particularly for elderly persons and families dependent upon mass transportation. Livable, walkable neighborhoods with mixed commercial uses offer additional sources of employment for adults and part-time jobs for teenagers.

The University of Wisconsin-Milwaukee Employment and Training Institute (ETI) has previously detailed the purchasing power and workforce opportunities in dense urban neighborhoods and the damage caused by marketing companies' false and stereotypical portrayals of these neighborhoods. Two sets of drill downs were developed by the Employment and Training Institute using state-of-the-art methodologies to meet the needs of business owners, community agencies, and academics in assessing the existing and potential retail market of individual neighborhoods:

- **ETI Purchasing Power Profiles** detail the annual expenditures of residents in each neighborhood for 16 major categories of consumer expenditures, utilizing a unique methodology developed by the Employment and Training Institute. The profiles were initially developed for retail districts in the City of Milwaukee and are now made available for every U.S. census tract and residential ZIP code free of charge on the ETI website (www.eti.uwm.edu) to help counter the negative stereotypes and overemphasis on median household income (versus density of spending) by national marketing firms.
- A second critical planning tool, the **Urban Markets Retail Sales Leakage/Surplus Drill Down**, shows the difference between the purchasing power of residents in urban markets compared to the retail sales estimated to result from retail employees in the neighborhood. Free estimates of each neighborhood's retail sales "leakage" or "surplus" are provided for all census tracts in the 100 largest metro areas in the U.S.

The Employment and Training Institute has now developed interactive online tools for retrieving recently released employer drilldowns from the 2000 Census by place-of-work special tabulations. ETI employer drill down reports are available free for any census tract (or combination of tracts within a county) in the U.S. based on the place of work of census respondents. These drill down reports include:

- **Business Place-of-Work Drill Downs** detail the characteristics of workers (residents and non-residents) employed in each neighborhood. Based on the 2000 Census long-form responses, tables are provided on employment activity in each census tract, including the type of employment, industry, occupations, earnings, and means of transportation to work. These drill downs were developed in cooperation with Southern University at New Orleans, whose faculty are assisting economic development and planning efforts in the Bienville Corridor of New Orleans.



- For the first time Census 2000 place-of-work tables are used to provide **Employer Diversity Drill Downs**, which describe employment located in each census tract in the U.S. by the race, Hispanic origin, and age of the workers by type of business. Data tables assess the race, Hispanic origin, and gender of the workforce employed in neighborhood businesses, examine earnings levels by race and age, and assess poverty status of workers by means of transportation to work.
- **Neighborhood Workforce Drill Downs** detail jobs held by employed residents living in each census tract by industry, earnings, occupations, and ethnic origin. Tables also show worker occupations and earnings by race/Hispanic origin, earnings by age, and the poverty status of workers by their means of transportation to work. Used in conjunction with the place-of-work tables, they help address spatial mismatch concerns and identify areas with potential for economic and workforce development initiatives.

Drill Down Applications for the Burleigh Main Street Project

ETI Purchasing Power Drill Downs provide information on detailed consumer spending by local residents for 16 major categories of retail items. ETI Urban Markets Drill Downs detail current retail expenditures compared to estimated retail sales for each tract in 100 metro areas of the U.S. ETI Employer Place-of-Work, Diversity, and Neighborhood Workforce Drill Downs provide descriptions of the jobs held by residents or by persons commuting into the neighborhood for work. Comparative data can be accessed for every census tract (and combinations of census tracts by county) in the state and the U.S. The place-of-work data are based on responses to the Census long-form questionnaire, provided to 1 in 6 U.S. households. Workers with more than one job at the time of the Census were asked to describe the job where they worked the most hours. Job totals showing the primary job of persons at work at the time of the Census consequently understate the total number of jobs in area companies, particularly for employers with part-time work. Cell totals may differ between tables depending on the weighting and rounding procedures used by the Census Bureau for each data file. See the **Methodology** section (pp. 9-22 below) for definitions of variables, descriptions of methodology, and rules used for rounding cells and totals.

Recent national and local initiatives to promote retail and other commercial development in urban communities include Renewal Communities supported by the U.S. Department of Housing and Urban Development, New Markets Tax Credits supported by the U.S. Department of Commerce, and Main Streets. Locally, the City of Milwaukee operates a Renewal Community program and four Main Street districts, the Wisconsin Housing and Economic Development Authority administers New Market Tax Credits Programs, and the Wisconsin Department of Commerce supports Wisconsin Main Street Programs throughout the state.

This report provides a template on how to use the ETI drill downs for local economic development projects and business plans. The report focuses on one of the City of Milwaukee Main Street Projects, which is seeking to revitalize the commercial district on Burleigh Street, from Sherman Boulevard to N. 60th Street. City of Milwaukee Main Street projects are supported with funding from HUD Community Development Block Grants and operated as a partnership between the Department of City Development and the Local Initiatives Support Corporation, LISC. The goals of each project are to involve residents in retaining and expanding existing businesses, converting underutilized commercial properties to more productive use, attracting new businesses, and developing marketing materials and strategies to create positive images for each district and to improve retail sales. (See the City of Milwaukee website at www.mkedcd.org/MainStreetMilwaukee.) The four districts funded in Milwaukee include: Burleigh Street (from Sherman Boulevard to N. 60th Street), Lincoln Avenue (from S. 5th Street to S. 20th Street), National Avenue (from S. 31st Street to S. 39th Street), and North 27th Street (from Highland Boulevard to St. Paul Avenue).



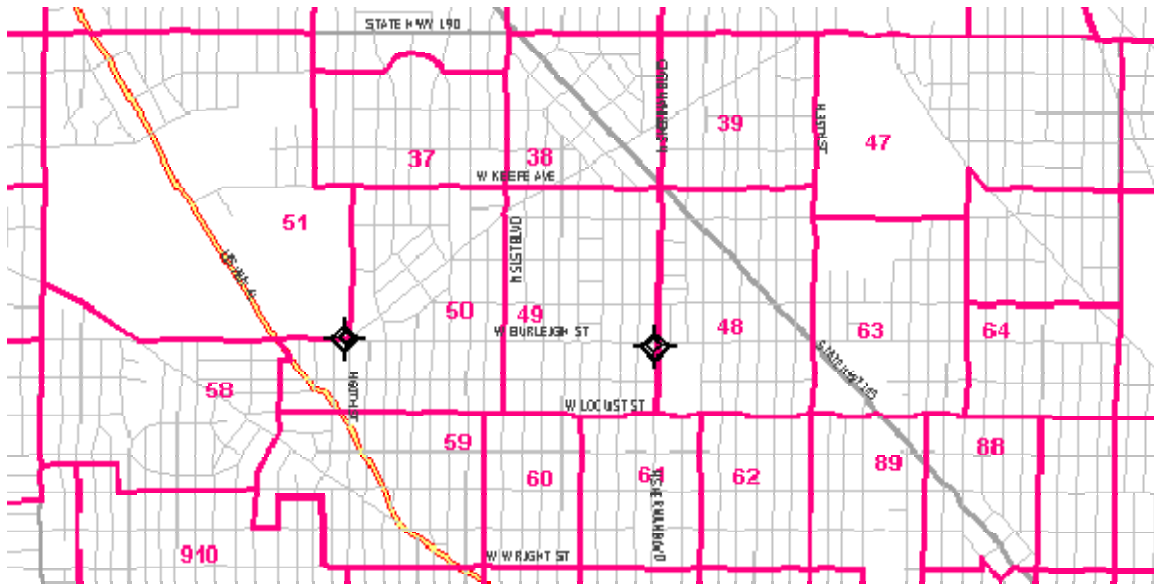
Acknowledgments

The Employment and Training Institute drill down reports were supported by funding from the University of Wisconsin-Milwaukee (UWM), Milwaukee Department of City Development, Milwaukee Economic Development Corporation, Southern University at New Orleans (SUNO), Helen Bader Foundation, and The Brookings Institution. The drill downs were developed by John Pawasarat, director of the Employment and Training Institute; Lois Quinn, senior scientist with the Institute; and Frank Stetzer, Senior Information Processing Consultant with the UWM Information and Media Technologies. For more information, contact John Pawasarat, Employment and Training Institute, University of Wisconsin-Milwaukee, 161 W. Wisconsin Avenue, Suite 6000, Milwaukee, WI 53203. Phone 414-227-3380. Email: eti@uwm.edu.

Milwaukee Drill photos, courtesy of Milwaukee Electric Tool Corporation



Drill Downs for Burleigh Street, from Sherman Boulevard to N. 60th Street

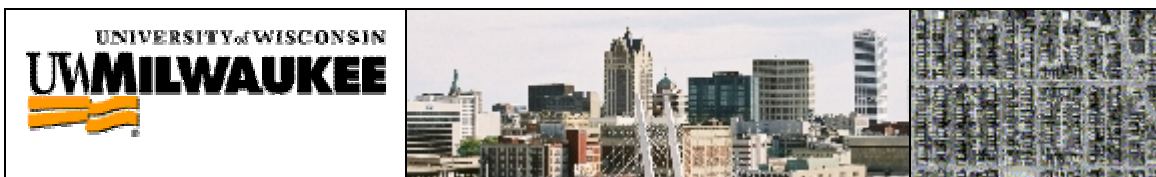


Highlights

- Residents living in a 4.14 square mile area near the Burleigh Street commercial district (from Sherman Boulevard to 60th Street) spend an estimated \$138 million annually on the 16 retail expenditure categories detailed below. This translates into \$33.4 million in spending per square mile.
- The neighborhood shows a net retail sales leakage, that is, residents are estimated to purchase more of their goods outside the neighborhood than estimated sales activity taking place within the neighborhood. The annual retail sales leakage for 15 major consumer expenditures (all the areas below, excluding food-away-from-home) is estimated at \$91.8 million for this neighborhood.
- At least 7,080 persons (including residents and non-residents) had jobs working for employers in the Burleigh Main Street District neighborhood at the time of the 2000 Census. Primary occupations of workers employed in the neighborhood included healthcare practitioners and technicians (22% of workers); office and administrative support (13%); education, training, library (11%); sales-related (7%); management (5%); and production (5%). Two-thirds of jobs in this neighborhood were held by women.
- The primary employers in the neighborhood were private for-profit (46% of jobs in the neighborhood), private not-for-profit (26%), local government (15%), and self-employment (9%).
- Most (72%) of the persons with jobs in the neighborhood drove to work. Another 10% used carpools or vanpools, and 6% used mass transit.
- A majority of residents work outside the neighborhood. The neighborhood population included 19,785 persons (aged 16 and older) at work at the time of the 2000 Census. Over half (53%) of resident workers were African American, 41% were white, 3% were Hispanic, and 3% were Asian, Native American, other, or of mixed races.

Note: Employment and Training Institute purchasing power calculations and 2000 Census data are for Milwaukee County tracts 37-39, 48-51, 56-62.





ETI Purchasing Power Profile: Burleigh Main Street Neighborhood

The University of Wisconsin-Milwaukee Employment and Training Institute provides comparison data on purchasing power, business activity, and workforce density for all census tracts, residential ZIP codes and the 100 largest metro areas in the U.S. The profiles are designed to help cities, businesses, developers, and organizations assess the advantages of urban density for underserved city neighborhoods.

Purchasing Power Profile for Residents of the Burleigh Main Street Neighborhood State: Wisconsin County: Milwaukee County Tracts: 0037, 0038, 0039, 0048, 0049, 0050, 0051, 0058, 0059, 0060, 0061, 0062 Land Area in Sq. Miles: 4.14		
Consumer Expenditure Category	Est. Annual Expenditures	Expenditures Per Square Mile
Food at home	\$56,688,045	\$13,694,951
Food away from home	\$19,248,276	\$4,650,085
Apparel and related services	\$18,881,955	\$4,561,587
Television equipment, tapes, disks	\$8,234,310	\$1,989,281
Audio equipment, CDs, tapes	\$2,123,020	\$512,889
Household textiles	\$1,180,142	\$285,104
Furniture	\$5,231,074	\$1,263,746
Floor coverings	\$479,998	\$115,960
Major appliances	\$2,558,504	\$618,095
Small appliances and housewares	\$796,490	\$192,420
Computer hardware and software	\$2,327,363	\$562,255
Miscellaneous household equipment	\$3,775,459	\$912,092
Non-prescription drugs and supplies	\$3,873,324	\$935,735
Housekeeping supplies	\$7,292,813	\$1,761,830
Personal products	\$4,504,184	\$1,088,141
Home repair commodities	\$1,330,303	\$321,381
Total for 16 categories	\$138,525,260	\$33,465,551

Source: University of Wisconsin-Milwaukee Employment and Training Institute, 2004. The analysis is based on 2002 Bureau of Labor Statistics Consumer Expenditure Surveys and 2000 U.S. Census data. See www.eti.uwm.edu.





The University of Wisconsin-Milwaukee Employment and Training Institute provides free Retail Market Opportunities Drill Downs to show the difference between the purchasing power of residents in urban neighborhoods compared to the retail sales estimated to result from numbers of retail employees in the neighborhood. Retail sales “leakage” or “surplus” estimates are available for each census tract in the 100 largest metro areas of the U.S.

**Retail Sales Leakage/Surplus Drill Down for the Burleigh Main Street Neighborhood
 State: Wisconsin County: Milwaukee
 Tracts: 37-39, 48-51, 58-62**

Estimated Purchasing Power for 15 Categories of Spending

To determine the extent to which existing retail businesses are capturing retail spending of local residents, consumer expenditures are estimated for 15 categories of consumer spending. All of the expenditure categories in the [ETI Purchasing Power Profiles](#) except for food-away-from-home are included in the estimates for the census tracts named above.

Estimated resident purchasing power for 15 categories: \$119,276,984

Estimated Retail Sales Leakage

Some neighborhoods are underserved by retail establishments or communities where residents purchase many of their goods outside the neighborhoods. In census tracts where the estimated sales for 15 major consumer areas fall below the estimated purchasing power of residents, neighborhoods are said to have a retail sales leakage. The census tracts named above show the following estimated retail sales [leakage](#).

Estimated retail sales leakage: \$91,836,374

Estimated Retail Sales Surplus

Some neighborhoods show greater sales than estimated resident spending for the 15 categories of consumer items. These neighborhoods may have retail establishments attracting customers from outside the neighborhood (i.e., shoppers attracted to particular retail businesses, in-coming commuters, college students living in dorms, etc.) The census tracts named above show the following estimated retail sales [surplus](#).

Estimated retail sales surplus: None

Source: University of Wisconsin-Milwaukee Employment and Training Institute, 2005. The analysis is based on the U.S. Census 2000 Place-of-Work Census Transportation Planning Package (CTPP) tabulations released in 2005; 2002 Bureau of Labor Statistics Consumer Expenditure Survey; and 2000 U.S. Census Data.





Business Place-of-Work Drill Downs: Burleigh Main Street Neighborhood

The University of Wisconsin-Milwaukee Employment and Training Institute, working with Southern University at New Orleans, now provides Business Place-of-Work Drill Downs, which show the characteristics of jobs in each neighborhood in the U.S. by type of employer, industry, earnings, occupations, and means of transportation to work. The drilldowns are presented for use in business plans, economic development proposals, and academic research.

Each table profiles the status of workers employed in the neighborhood, whether or not they are residents.

Table 3:

Occupations by Sex for <u>Place-of-Work</u> in the Burleigh Main Street Neighborhood			
State: Wisconsin County: Milwaukee County			
Tracts: 0037, 0038, 0039, 0048, 0049, 0050, 0051, 0058, 0059, 0060, 0061, 0062			
Total Workers	Male	Female	Occupational Grouping
7080	2395	4685	Total Occupation
370	194	172	Management
0	0	0	Farmers, farm managers
77	54	28	Business, financial operations
115	59	54	Computer, mathematical
43	43	0	Architecture, engineering
78	63	14	Life, physical, social science
257	53	208	Community, social service
10	10	0	Legal
803	198	604	Education, training, library
51	29	22	Arts, design, entertainment, sports, media
1548	194	1348	Healthcare practitioners, technicians
373	14	363	Healthcare support
239	184	52	Protective service
317	88	232	Food preparation, serving related
133	73	58	Building, grounds cleaning, maintenance
334	63	268	Personal care, service
495	248	254	Sales, related
950	180	785	Office, administrative support
10	10	0	Farming, fishing, forestry
92	82	10	Construction, excavation
165	165	0	Installation, maintenance, repairs
363	213	143	Production
190	154	33	Transportation, material moving
0	0	0	Armed forces

Table 4:

Class of Worker by <u>Place-of-Work</u> in the Burleigh Main Street Neighborhood		
State: Wisconsin County: Milwaukee County		
Tracts: 0037, 0038, 0039, 0048, 0049, 0050, 0051, 0058, 0059, 0060, 0061, 0062		
Total Workers	Percent of Total	Class of Worker
7080	100.0	Total, Class of worker
3280	46.3	Private for-profit wage and salary
1875	26.5	Private not-for-profit wage and salary
1054	14.9	Local government workers
105	1.5	State government workers
109	1.5	Federal government workers
645	9.1	Self-employed not incorporated
4	0.1	Unpaid family workers

Source: Census Transportation Planning Package (CTPP2000) data on place-of-work based on responses to the 2000 Census long-form questionnaire. The primary job is reported for each worker and cell values are rounded. These Business Place-of-Work Drill Downs were prepared by the University of Wisconsin-Milwaukee Employment and Training Institute, 2005. See www.eti.uwm.edu.





Employer Diversity Drill Downs: Burleigh Main Street Neighborhood

The University of Wisconsin-Milwaukee Employment and Training Institute offers Employer Diversity Drill Downs to help identify neighborhoods that offer employment for workers of various racial/ethnic backgrounds and to assess the race/Hispanic origin of the workforce employed in each U.S. neighborhood, according to the 2000 U.S. Census.

Each table profiles the status of workers employed in the neighborhood, whether or not they are residents.

Table 1:

Worker Industry by Ethnic Origin for <u>Place-of-Work</u> in the Burleigh Main Street Neighborhood						
State: Wisconsin County: Milwaukee County						
Tracts: 0037, 0038, 0039, 0048, 0049, 0050, 0051, 0058, 0059, 0060, 0061, 0062						
Total Workers	White	Black	Hispanic	Asian	Other	Industry
7080	4390	2250	161	99	148	Total, Industry
10	10	0	0	0	0	Agriculture, forestry, mining
127	89	37	0	0	4	Construction
359	230	61	23	18	4	Manufacturing
58	54	4	0	0	0	Wholesale trade
442	263	128	14	4	28	Retail trade
218	138	68	15	0	0	Transportation, warehousing, utilities
87	52	29	4	0	0	Information
255	145	94	0	0	10	Finance, insurance, real estate
293	159	134	4	4	0	Professional, management, administrative services
4075	2674	1210	63	44	78	Educational, health and social services
304	112	173	0	14	10	Entertainment, accommodations, food services
559	306	237	18	0	12	Other services (except public)
250	159	59	14	4	4	Public administration
0	0	0	0	0	0	Armed Forces

Source: Census Transportation Planning Package (CTPP2000) data on place-of-work based on responses to the 2000 Census long-form questionnaire. Only 1 job is reported for each worker and cell values are rounded. See methodology for definitions of race/ethnicity. Drill Downs were prepared by the University of Wisconsin-Milwaukee Employment and Training Institute, 2005.

Table 5:

Worker Earnings by Age for <u>Place-of-Work</u> in the Burleigh Main Street Neighborhood						
State: Wisconsin County: Milwaukee County						
Tracts: 0037, 0038, 0039, 0048, 0049, 0050, 0051, 0058, 0059, 0060, 0061, 0062						
Total Workers	<18	18-24	25-44	45-64	>64	Worker Earnings in 1999
7080	150	779	3595	2285	264	Total
505	74	128	133	117	36	Less than \$5,000
624	22	225	147	143	78	\$5,000 to \$9,999
614	10	128	237	159	68	\$10,000 to \$14,999
714	15	102	398	165	16	\$15,000 to \$19,999
743	0	34	459	253	4	\$20,000 to \$24,999
774	0	29	499	233	8	\$25,000 to \$29,999
565	0	35	340	179	14	\$30,000 to \$34,999
1295	0	14	804	455	8	\$35,000 to \$49,999
679	0	0	278	383	4	\$50,000 to \$74,999
385	0	14	214	138	10	\$75,000 or more
168	30	38	64	36	4	No earnings

Source: Census Transportation Planning Package (CTPP2000) data on place-of-work based on responses to the 2000 Census long-form questionnaire. Only 1 job is reported for each worker and cell values are rounded. The Employer Diversity Drill Downs were prepared by the University of Wisconsin-Milwaukee Employment and Training Institute, 2005. See www.eti.uwm.edu.





Nearighborhood Workforce Drill Downs: Burleigh Main Street Neighborhood

The University of Wisconsin-Milwaukee Employment and Training Institute has prepared easy-to-use, free downloads of 2000 Census data on workers residing in each U.S. census tract. Researchers, business developers, public officials, and neighborhood organizations can use these tables to examine the characteristics of the resident workforce for any combination of tracts. These drill downs can be used together with the same set of tables for place-of-work drill downs to assess spatial and skill mismatches between resident workers and jobs in and out of the neighborhood.

Each table profiles **jobs held by employed residents who live in the census tracts**, regardless of whether the residents work in this neighborhood or elsewhere.

Table 10:

Means of Transportation to Work by Industry for <u>Residents</u> of the Burleigh Main Street Neighborhood					
State: Wisconsin County: Milwaukee County					
Tracts: 0037, 0038, 0039, 0048, 0049, 0050, 0051, 0058, 0059, 0060, 0061, 0062					
Total Workers	Drove Alone	Carpool	Mass Transit	Else	Industry
19785	14020	2702	1984	1052	Total, Industry
23	23	0	0	0	Agriculture, forestry, mining
585	425	118	20	28	Construction
3255	2465	453	224	105	Manufacturing
475	380	47	38	0	Wholesale trade
1695	1170	212	254	59	Retail trade
1080	795	139	67	56	Transportation, warehousing, utilities
674	534	94	43	0	Information
1575	1180	148	169	54	Finance, insurance, real estate
1505	1050	181	209	54	Professional, management, administrative services
5855	3930	915	518	481	Educational, health and social services
1160	700	146	232	82	Entertainment, accommodations, food services
820	519	116	91	77	Other services (except public)
1080	865	106	107	4	Public administration
16	8	0	4	4	Armed Forces

Source: Census Transportation Planning Package (CTPP2000) data on place-of-work based on responses to the 2000 Census long-form questionnaire. Only 1 job is reported for each worker 16 and older and cell values are rounded. See methodology for definitions. Drill Downs were prepared by the University of Wisconsin-Milwaukee Employment and Training Institute, 2005.

Table 4:

Type of Employer by Race/Ethnicity for <u>Residents</u> of the Burleigh Main Street Neighborhood						
State: Wisconsin County: Milwaukee County						
Tracts: 0037, 0038, 0039, 0048, 0049, 0050, 0051, 0058, 0059, 0060, 0061, 0062						
Total Workers	White	Black	Hispanic	Asian	Other	Class of Worker
19785	8095	10575	544	162	408	Total, Class of worker
12940	5220	6925	313	152	303	Private for-profit wage and salary
2325	1184	1049	59	0	28	Private not-for-profit wage and salary
2520	1015	1350	109	0	36	Local government workers
650	223	383	18	0	15	State government workers
555	106	413	12	0	8	Federal government workers
800	338	440	15	10	0	Self-employed not incorporated
22	14	8	0	0	0	Unpaid family workers

Source: Census Transportation Planning Package (CTPP2000) data on place-of-work based on responses to the 2000 Census long-form questionnaire. Only 1 job is reported for each worker 16 and older and cell values are rounded. See methodology for definitions of race/ethnicity. Drill Downs were prepared by the University of Wisconsin-Milwaukee Employment and Training Institute, 2005.



Methodology

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Purchasing Power Profile Methodology

The Purchasing Power Profiles are prepared by the University of Wisconsin-Milwaukee Employment and Training Institute to identify estimated expenditure patterns for residential neighborhoods. The Purchasing Power Profiles are based on spending patterns taken from the 2002 U.S. Census Bureau Consumer Expenditure Surveys (CEX) for common retail items, utilizing survey responses from more than 30,000 interviews of households with complete income and expenditure responses. Two years of additional expenditure data are drawn from the CEX diary file, which includes patterns of spending by more than 22,000 respondents. The CEX provides data on spending by income levels and family types, which makes it possible to estimate expenditures within communities. For the Public Power Profiles, five types of households by five levels of income ranges (i.e., 25 cells of data) are derived from the 2000 U.S. Census and used to estimate expenditures, based on CEX data, for each of the 16 retail categories listed below:

1. **Food at Home** includes expenditures for food purchased at grocery stores and convenience stores, and food prepared at home for out-of-town trips.
2. **Food Away from Home** includes expenditures for meals at restaurants, carry-out orders, food purchased on out-of-town trips, school lunches, and meals as pay.
3. **Apparel and Related Services** includes expenditures clothing (suits, coats, sweaters, shirts, skirts, nightware, undergarments, hosiery, uniforms, costumes, etc.), accessories, footwear, material for making clothes, watches, jewelry, shoe repair, laundry and dry cleaning costs, and clothing storage.
4. **Television Equipment, Tapes and Discs** includes expenditures for TVs, VCRs and video disc players; video cassettes, tapes and discs; video game hardware and software; cable and satellite service; repairs of TVs, radio and sound equipment; and rental of televisions.



5. **Audio Equipment, CDs, and Tapes** includes expenditures for radios; tape recorders and players; sound components and component systems; records, CDs, audio tapes, and needles; record, tape, CD and video mail order clubs; musical instruments; accessories and other sound equipment; satellite dishes; and rental of above equipment.
6. **Household Textiles** includes expenditures for bathroom, bedroom, kitchen and dining room linens; curtains and draperies; slipcovers and decorative pillows; sewing materials for the home.
7. **Furniture** includes expenditures for mattresses and springs; sofas; living room tables and chairs; kitchen and dining room furniture; infants' furniture; outdoor furniture; wall units, cabinets and other occasional furniture.
8. **Floor Coverings** includes expenditures for wall-to-wall carpeting (for renters and homeowners) and non-permanent floor coverings.
9. **Major Appliances** includes expenditures for dishwashers, garbage disposals, refrigerators, freezers, washing machines, clothes dryers, cooking stoves, microwave ovens, air conditioners; floor cleaning equipment, and sewing machines.
10. **Small Appliances and Housewares** includes expenditures for china, dinnerware, flatware, glassware, serving pieces, small electric kitchen appliances, and portable heating and cooling equipment.
11. **Computer Hardware and Software** includes expenditures for computers, computer hardware, computer software and accessories, for nonbusiness use.
12. **Miscellaneous Household Equipment** includes expenditures for window coverings, infants' equipment, outdoor equipment, clocks, lamps and lighting fixtures; other household decorative items; telephones and accessories; lawn and garden equipment; power tools; hand tools; plants and fresh flowers; closet and storage items; rental of furniture; and luggage.
13. **Non-Prescription Drugs and Supplies** includes expenditures for non-prescription drugs, non-prescription vitamins, eyeglasses and contact lenses, topicals and dressings, medical equipment for general use, supportive and convalescent medical equipment, and rental and repair of medical equipment.
14. **Housekeeping Supplies** includes expenditures for laundry and cleaning supplies, cleansing and toilet tissue, paper towels and napkins, miscellaneous household products, and lawn and garden supplies.
15. **Personal Products** includes expenditures for hair care products, nonelectric articles for the hair, wigs and hairpieces, oral hygiene products and articles, shaving needs, cosmetics, perfume, bath preparation products, deodorants, feminine hygiene articles, and miscellaneous personal care items.
16. **Home Repair Commodities** includes expenditures for paints; wallpapers; electrical supplies for heating and cooling equipment; materials for hard surface flooring, repair and replacement; materials and equipment for roof and gutters; materials for plastering, paneling, siding, windows, doors, screens, awnings; materials for patios, walks, fences, driveways, brick, masonry and stucco work; materials for landscaping maintenance; materials to finish basements, remodel rooms, or build patios, walks, etc.

Purchasing power estimates per square mile are calculated using the land area of the geographical unit. Emphasis on average household income by major marketing firms, rather than spending per square mile,



misses significant retail spending by large urban populations, and particularly the aggregate spending that occurs in dense urban neighborhoods. The CEX shows that families with lower incomes spend much higher percentages of their income on common retail purchases. Additionally, these families are often clustered in very dense neighborhoods while many upper income families reside in sparsely populated suburban or exurban areas.

Urban Markets Retail Sales Leakage/Surplus Methodology

Some neighborhoods are underserved by retail establishments and residents purchase many of their goods outside their community. Those census tracts where neighborhood retail sales fall below the estimated purchases of residents are said to have a **retail sales leakage**. That retail sales leakage is calculated by comparing the sales levels estimated from retail employment data with retail purchases from the purchasing power profiles. **Retail sales surpluses** occur in other tracts where retail sales estimated from retail employment data exceed local resident expenditures. These communities may have retail establishments attracting customers from outside the neighborhood, e.g., shoppers attracted to particular retail businesses, in-coming commuters, or stores serving metrowide markets.

Estimates are developed for all census tracts in the 100 largest metro areas in the U.S. to gauge retail sales activity in each neighborhood. To determine the extent to which existing retail businesses are capturing retail spending of local residents, consumer expenditures were estimated for 15 categories of consumer spending. All of the expenditure categories in the ETI Purchasing Power Profiles except for food-away-from-home (which is not in the NAICS retail sector) are included in the estimates for the census tracts named above. This total is compared to estimates of retail sales derived from comparing employment in retail sales work by census tract with the total employment in retail sales for the metro area.

Census 2000 Place-of-Work Tables

The Census Transportation Planning Package (CTPP) is a special tabulation available for the 1990 and 2000 censuses, offering special tabulations of census data tailored to meet the data needs of transportation planners nationwide. The 2000 CTPP was sponsored by the state and federal departments of transportation.

The University of Wisconsin-Milwaukee Employment and Training Institute has focused on the CTPP 2000 place-of-work data from the perspective of central city neighborhoods seeking greater business and employment opportunities for their residents. Using data files released in 2004 and 2005, ETI developed three sets of drill down reports: Business Place-of-Work Drill Downs, Employer Diversity Drill Downs, and Neighborhood Workforce Drill Downs. These drill down reports are now available free from the Employment and Training Institute website (at www.eti.uwm.edu) for all census tracts in the U.S.

Most of the definitions and description of methodology reported here are excerpted from the “Census Transportation Planning Package 2000 Definition of Subject Characteristics,” posted at www.mtc.ca.gov/maps_and_data/datamart/census/ctpp2000/CTPP_TechDoc.pdf. See also, www.fhwa.dot.gov/ctpp/about.htm and www.census.gov.

Census Data Tabulations

The CTPP2000 includes a series of tabulations for various levels of geography, including state, county, place, census tract and block group, and traffic analysis zone (TAZ). The tables in the CTPP relate social and demographic characteristics of persons, households, and workers to their journey-to-work characteristics, such as travel time and travel mode to work.

Three types of data tabulations are provided in the CTPP:



- **Place of residence** tables show the number and characteristics of housing units, persons, and workers who live in each geographic area.
- **Place-of-work** tables show the number and characteristics of persons who work in each geographic area (regardless of where they live).
- **Commuter flow** tables show the number and characteristics of persons in each worktrip origin-destination pair of geographic areas.

The three types of data tabulations are produced for a full range of areas in the geographic hierarchy. Summary levels include state, county, minor civil division, and place. At the detailed geographic level, data are available at the census tract level and for participating states, at the block group and/or traffic analysis zone level.

The data on workers in CTPP 2000 are drawn from answers to questions 21, 22, 27, 28 and 29 of the Census 2000 long-form questionnaire, mailed to one in six U.S. households. (The long form questionnaire is available at: www.census.gov/dmd/www/pdf/d02p.pdf.) Data were tabulated for workers 16 years old and over who were at work during the week prior to when the questionnaire was filled out. This large sample is used to estimate totals for the entire population.

Rounding Used in the CTPP 2000 Data

The estimates of workers in the CTPP 2000 tabulations have been rounded for each reported cell. Values from 1 thru 7 were rounded to 4. Values of 8 or greater were rounded to the nearest multiple of 5, unless the estimate already ended in 5 or 0, in which case it was not changed. As a result, estimates derived from these files may not be identical to comparable figures contained in other census products. The greater the number of records from these files that are summed for comparison purposes, the more rounding errors there may be and the greater the difference between the estimates from different sources may be.

Definition of Workers

In the special tabulations, **workers** are defined as people 16 years and older who were employed and at work during the Census reference week. This is the week prior to when the questionnaire was filled out, for most people the week ending with April 1, 2000. Workers include both civilians and people in the Armed Forces, and part-time workers as well as full-time. People who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons are not included in the place-of-work data.

If a worker held two jobs, only data about the primary job (the one where the person worked the most hours during the preceding week) was requested. People who regularly worked in several locations during the reference week were requested to give the address at which they began work each day. For cases in which daily work was not begun at a central place each day, the person was asked to provide as much information as possible to describe the area in which he or she worked most during the reference week.

CTPP Workers-at-Work Compared to Other Employment Estimates

Counts of workers-at-work obtained from CTPP 2000 will differ from other employment data sources. **While examining CTPP worker counts against other data sources, note that total jobs and total employment in each geographical area will be HIGHER than CTPP worker counts.** The number of workers shown in CTPP Part 2 will be approximately 91 to 93 percent of the number of jobs counted by establishment inventories. (See the CTPP Status Report, July 2003 at www.fhwa.dot.gov/ctpp/sr0503.htm.) There are several reasons for differences between worker counts and total jobs:



1. Census 2000 counts employed persons, not jobs. For persons with more than one job, characteristics on only the principal job are collected. Nationally, about 6 percent of workers have second jobs.
2. CTPP 2000 reports only those workers who were **at work** during the reference week. About 2 percent of employed workers are absent who are from work in any given week. The Census Bureau also notes that people who had irregular, casual, or unstructured jobs during the reference week may have erroneously reported themselves as not working.
3. CTPP includes full-time and part-time workers, of all classes (wage and salary, self-employed, private or public). By contrast, most other employment data sources count jobs. Some sources omit persons who are self-employed, some count only wage and salary jobs, and some exclude most public sector jobs.
4. Because the decennial census questions on employment are designed to capture the workplace at which the respondent worked the most hours, workers who worked two or more jobs are captured at only one of their workplaces. The local effect is that CTPP data may show substantially fewer workers in those areas/zones where second jobs and part-time employment are more the norm. Examples of such areas include:
 - Areas where retail trade and similar service industries are predominant.
 - Colleges and university areas. Typically, colleges/universities employ considerable numbers of part-time adjunct teachers, a trend that increased during the 1990s. Therefore, census tracts or traffic analysis zones (TAZs) with colleges and universities may reflect lower worker totals than the institution's own figures.
5. Multi-site businesses and some job types are not reported consistently by employers or employees, and as a result are difficult to geocode and likely to show variability from one source to another. In business and establishment surveys, companies with more than one work location may still report all their workers at a single location, typically a corporate office building. The state unemployment insurance agencies that maintain ES-202 files vary in their efforts to distribute job counts to the company's individual work locations.
6. While most workers have only a single work location, there are industries where the majority of jobs do not follow this pattern. Some people will give the address of their current assignment, some will give the headquarters' address appearing on their mail or paycheck, and some may give no answer.

“Place of Work” Definitions

The address where the individual worked most often during the reference week was recorded on the Census 2000 questionnaire (question 22). The exact address (number and street name) of the place of work was asked, as well as the place (city, town, or post office); whether or not the place of work was inside or outside the limits of that city or town; and the county, state or foreign country, and ZIP Code. If the person's employer operated in more than one location, the exact address of the location or branch where the respondent worked was requested. When the number and street name were unknown, a description of the location, such as the building name or nearest street or intersection, was to be entered.

In areas where the workplace address was coded to the block level, people were tabulated as working inside or outside a specific place based on the location of that address, regardless of the response to question 22c concerning city/town limits. In areas where it was impossible to code the workplace address to the block level, people were tabulated as working in a place if a place name was reported in question 22b and the response to question 22c was either "yes" or the item was left blank. In selected areas, census designated



places (CDPs) may appear in the tabulations as places of work. The accuracy of place-of-work data for CDPs may be affected by the extent to which their census names were familiar to respondents, and by coding problems caused by similarities between the CDP name and names of other geographic jurisdictions in the same vicinity.

Place-of-work data are given for minor civil divisions (MCDs) (generally, cities, towns, and townships) in 12 selected states (Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Wisconsin), based on the responses to the place of work question. Many towns and townships are regarded locally as equivalent to a place, and therefore, were reported as the place of work. When a respondent reported a locality or incorporated place that formed a part of a township or town, the coding and tabulating procedure was designed to include the response in the total for the township or town.

Comparability of Place-of-Work Data: 1980 - 2000

The wording of the question on place of work was substantially the same in Census 2000, the 1990 census, and the 1980 census. However, data on place of work from Census 2000 and the 1990 census are based on the full census sample, while data from the 1980 census were based on only about one-half of the full sample. For the 1980 census, nonresponse or incomplete responses to the place-of-work question were not allocated, resulting in the use of "not reported" categories in the 1980 publications. However, for Census 2000 and the 1990 census, when place of work was not reported or the responses was incomplete, a work location was allocated to the person based on their means of transportation to work, travel time to work, industry, and location of residence and workplace of others. Census 2000 and 1990 census tabulations, therefore, do not contain a "not reported" category for the place-of-work data.

Comparisons between 1980, 1990 or Census 2000 data on the gross number of workers in particular commuting flows, or the total number of people working in an area, should be made with extreme caution. Any apparent increase in the magnitude of the gross numbers may be due solely to the fact that for Census 2000 and the 1990 census, the "not reported" cases have been distributed among specific place-of-work destinations, instead of tallied in a separate category, as, a nonwork destination.

Definitions of Race/Ethnicity

The CTPP2000 used four racial categories for reporting its data tables:

- White alone
- Black or African American alone
- Asian alone
- All other (including persons reported as 2 or more races, Native Hawaiian or Pacific Islander, American Indian or Alaska Native, or other race.

Workers were also identified as

- Hispanic or Latino
- Not Hispanic or Latino

For the ETI Diversity Drill Downs, all workers identified as "Hispanic or Latino" are included in that category. The four categories of race listed above were used for persons who were **not** identified as Hispanic or Latino. The resulting five racial/ethnic categories are used in the drilldowns:



1. Hispanic or Latino (all races)
2. White alone AND non-Hispanic/Latino
3. Black or African American alone AND non-Hispanic/Latino
4. Asian alone AND non-Hispanic/Latino
5. All other races and combinations of races AND non-Hispanic/Latino

Comparability of Race/Ethnic Data

The data on race in Census 2000 are not directly comparable to those collected in previous censuses. First, respondents were allowed to select more than one category for race in 2000. The CTPP tabulations considered persons to be of a race if they indicated that race **alone**. Persons indicating two or more races were included in an “all other” category for many of the tables provided. The fifth category listed above (“all other races and combinations of races AND non-Hispanic/Latino”) is consequently larger than the “Some other race” category shown in the 2000 Census since it includes people with more than one race.

As in 1980 and 1990, people who reported a Hispanic or Latino ethnicity in the question on race and did not mark a specific race category were classified in the “Some other race” category (“Other” in 1980 and “Other race” in 1990). They commonly provided a write-in entry such as Mexicans, Puerto Rican, or Latino. In the 1970 census, most of these responses were included in the “White” category. In addition, some ethnic entries that in 1990 may have been coded as White or Black are now shown in the “Some other race” group.

Definitions of Class of Worker

In addition to naming their employer and describing the type of work, workers were asked to indicate the type of employer for which they worked the most in the prior week. Occupations and types of work are then broken down into the following classes.

Private Wage and Salary Workers includes people who worked for wages, salary, commission, tips, pay-in-kind, or piece rates for a private-for-profit employer or a private-not-for-profit, tax-exempt, or charitable organization. Self-employed people whose business was incorporated are included with private wage and salary workers because they are paid employees of their own companies. Some tabulations present data separately for these subcategories: "For profit," "Not-for-profit," and "Own business incorporated."

Government Workers includes people who are employees of any local, state, or federal governmental unit, regardless of the activity of the particular agency. Employees of foreign governments, the United Nations, or other formal international organizations controlled by governments should be classified as "Federal Government employee."

Self-Employed Workers includes people who worked for profit or fees in their own unincorporated business, profession, or trade, or who operated a farm.

Unpaid Family Workers includes people who worked 15 hours or more without pay in a business or on a farm operated by a relative.

In tabulations that categorize persons as either **salaried or self-employed**, the salaried category includes private and government wage and salary workers; self-employed includes self-employed people and unpaid family workers.



Means of Transportation to Work

Means of transportation to work refers to the principal mode of travel or type of conveyance that the worker usually used to get from home to work during the reference week. People who used more than one means of transportation to get to work each day were asked to report the one used for the longest distance during the work trip.

The category “Car, truck, or van – drove alone” includes people who usually drove alone to work, as well as people who were driven to work by someone who then drove back home or to a nonwork destination during the reference week. The category “Carpooled,” includes workers who reported that two or more people usually rode to work in the vehicle during the reference week. The category “Public transportation” includes workers who usually used a bus, trolley bus, streetcar, trolley car, subway, elevated, railroad, ferryboat, or taxicab during the reference week. The category “Other means” includes workers who used a mode of travel that is not identified separately. The category “Other means” may vary from table to table, depending on the detail shown in a particular distribution.

The means of transportation data for some areas may show workers using modes of public transportation that are not available for those areas (for example, subway or elevated riders in a metropolitan area where there actually is no subway or elevated service). This result is largely due to people who worked during the reference week at a location that was different from their usual place of work (such as people away from home on business in an area where subway service was available) and people who used more than one means of transportation each day but whose principal means was unavailable where they lived (for example, residents of nonmetropolitan areas who drove to the fringe of a metropolitan area and took the commuter railroad most of the distance to work).

Poverty Status in 1999

The Census Bureau used the federal government's official poverty definition. The poverty status of families and unrelated individuals in 1999 was determined using 48 thresholds (income cutoffs) arranged in a two dimensional matrix. The matrix consists of family size (from one person to nine or more people) cross-classified by presence and number of family members under 18 years old (from no children present to eight or more children present). Unrelated individuals and two-person families were further differentiated by the age of the reference person (under 65 years old, and 65 years old and over).

To determine a person's poverty status, the person's total family income is compared with the poverty threshold appropriate for that person's family size and composition. If the total income of that person's family is less than the threshold appropriate for that family, then the person is considered poor, together with every member of his or her family. If a person is not living with anyone related by birth, marriage, or adoption, then the person's own income is compared with his or her poverty threshold. Poverty status was determined for all people except institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old. These groups also were excluded from the numerator and denominator when calculating poverty rates. They are considered neither “poor” nor “nonpoor.”

Definitions of Industries

The Census long-form questionnaire asked for the name of the employer (“company, business, or other employer” for which each worker worked in the reference week along with a description of the kind of business or industry taking place where the worker was employed. Responses were coded using the industry classification system developed from the 1997 North American Industry Classification System (NAICS) published by the Office of Management and Budget. NAICS is an industry description system that groups establishments into industries based on the activities in which they are primarily engaged. NAICS is erected on a production-oriented or supply-based conceptual framework in that establishments are grouped into industries according to similarity in the processes used to produce goods or services. The NAICS sectors,



their two-digit codes, and the distinguishing activities of each are excerpted from the Department of Commerce site at www.ntis.gov/naics.

11 Agriculture, Forestry, Fishing and Hunting -- Activities of this sector are growing crops, raising animals, harvesting timber, and harvesting fish and other animals from farms, ranches, or the animals' natural habitats.

21 Mining -- Activities of this sector are extracting naturally occurring mineral solids, such as coal and ore, liquid minerals, such as crude petroleum; and gases, such as natural gas; and beneficiating (e.g., crushing, screening, washing, and flotation) and other preparation at the mine site, or as part of mining activity.

22 Utilities -- Activities of this sector are generating, transmitting, and/or distributing electricity, gas, steam, and water and removing sewage through a permanent infrastructure of lines, mains, and pipe.

23 Construction -- Activities of this sector are erecting buildings and other structures (including additions); heavy construction other than buildings; and alterations, reconstruction, installation, and maintenance and repairs.

31-33 Manufacturing -- Activities of this sector are the mechanical, physical, or chemical transformation of material, substances, or components into new products.

41-43 Wholesale Trade -- Activities of this sector are selling or arranging for the purchase or sale of goods for resale; capital or durable nonconsumer goods; and raw and intermediate materials and supplies used in production, and providing services incidental to the sale of the merchandise.

44-46 Retail Trade -- Activities of this sector are retailing merchandise generally in small quantities to the general public and providing services incidental to the sale of the merchandise.

48-49 Transportation and Warehousing -- Activities of this sector are providing transportation of passengers and cargo, warehousing and storing goods, scenic and sightseeing transportation, and supporting these activities.

51 Information -- Activities of this sector are distributing information and cultural products, providing the means to transmit or distribute these products as data or communications, and processing data.

52 Finance and Insurance -- Activities of this sector involve the creation, liquidation, or change in ownership of financial assets (financial transactions) and/or facilitating financial transactions.

53 Real Estate and Rental and Leasing -- Activities of this sector are renting, leasing, or otherwise allowing the use of tangible or intangible assets (except copyrighted works), and providing related services.

54 Professional, Scientific, and Technical Services -- Activities of this sector are performing professional, scientific, and technical services for the operations of other organizations.

55 Management of Companies and Enterprises -- Activities of this sector are the holding of securities of companies and enterprises, for the purpose of owning controlling interest or influencing their management decision, or administering, overseeing, and managing other establishments of the same company or enterprise and normally undertaking the strategic or organizational planning and decision making of the company or enterprise.



56 Administrative and Support and Waste Management and Remediation Services --- Activities of this sector are performing routine support activities for the day-to-day operations of other organizations.

61 Educational Services -- Activities of this sector are providing instruction and training in a wide variety of subjects.

62 Health Care and Social Assistance -- Activities of this sector are providing health care and social assistance for individuals.

71 Arts, Entertainment, and Recreation -- Activities of this sector are operating or providing services to meet varied cultural, entertainment, and recreational interests of their patrons.

72 Accommodation and Food Services -- Activities of this sector are providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption.

81 Other Services (except Public Administration) -- Activities of this sector are providing services not elsewhere specified, including repairs, religious activities, grantmaking, advocacy, laundry, personal care, death care, and other personal services.

91-93 Public Administration -- Activities of this sector are administration, management, and oversight of public programs by Federal, State, and local governments.

Definitions of Occupational Groupings

The occupational classification system used during Census 2000 consists of 509 specific occupational categories arranged into major occupational groupings. Some occupation groups are related closely to certain industries (i.e., healthcare providers account for major portions of health care occupations). However, the industry categories include people in other occupations. (For example, people employed in the health care industry include occupations such as security guard, and secretary.) The following occupational groupings used for the CTPP 2000 tables are summarized from the CTPP documentation files on CD.

1. **Management Occupations, Part --** chief executives; general and operations managers; legislators; managers, including advertising and promotions, marketing and sales, public relations, administrative service, computer and information systems, finance, human resources, industrial production, purchasing, transportation, storage, and distribution managers.
2. **Farmers and Farm Managers --** farm, ranch, and other agricultural managers; farmers and ranchers.
3. **Management Occupations, Part --** education administrators; funeral directors; managers in construction, engineering, food service, gaming, lodging, medical and health services, natural sciences, property, real estate, community association, social and community service; postmasters and mail superintendents.
4. **Business and Financial Operations Specialists --** agents and business managers of artists, performers, and athletes; purchasing agents and buyers; claims adjusters, appraisers, examiners, and investigators; compliance officers, except agriculture, construction, health and safety, and transportation; cost estimators; human resources, training, and labor relations specialists; logisticians; management, budget, and credit analysts; meeting and convention planners; financial and other business operations specialists; accountants and auditors; appraisers and assessors of real estate; personal financial advisors; insurance underwriters; financial examiners; loan counselors and officers; tax examiners, collectors, and revenue agents; tax preparers.



5. **Computer and Mathematical Occupations** -- computer scientists and systems analysts; computer programmers, software engineers, and support specialists; database, network, and computer systems administrators; network systems and data communications analysts; actuaries; mathematicians; operations research analysts; statisticians; miscellaneous mathematical science occupations.
6. **Architecture and Engineering Occupations** – architects; surveyors, cartographers, and photogrammetrists; engineers, including aerospace, agricultural, biomedical, chemical, civil, computer hardware, electrical and electronics, environmental, industrial engineers, marine, materials, mechanical, mining and geological, nuclear, petroleum, and all other engineers; drafters; engineering technicians; surveying and mapping technicians.
7. **Life, Physical and Social Science Occupations** – scientists, including agricultural, food, biological, conservation, medical, atmospheric and space, materials, environmental, physical, and all other scientists; astronomers and physicists; chemists; geoscientists; economists; foresters; market and survey researchers; psychologists; sociologists; urban and regional planners; miscellaneous social scientists and related workers; technicians, including agricultural and food science, biological, chemical, geological and petroleum, nuclear, and other life, physical, and social science technicians.
8. **Community and Social Service Occupations** -- counselors; social workers; miscellaneous community and social service specialists; clergy; directors, religious activities and education; religious workers, all other.
9. **Legal Occupations** -- lawyers; judges, magistrates, and other judicial workers; paralegals and legal assistants; miscellaneous legal support workers.
10. **Educations, Training, and Library Occupations** – teachers, including postsecondary, preschool, kindergarten, elementary, middle school, secondary school, special education, and other teachers and instructors; archivists, curators, and museum technicians; librarians; library technicians; teacher assistants; other education, training and library workers.
11. **Arts, Design, Entertainment, Sports, and Media Occupations** – artists; designers; actors; producers and directors; athletes, coaches, umpires; dancers and choreographers; musicians, singers, and related workers; entertainers and performers, sports and related workers; announcers; news analysts, reporters and correspondents; public relations specialists; editors; technical writers; writers and authors; miscellaneous media and communication workers; broadcast and sound engineering technicians and radio operators; photographers; television, video, and motion picture camera operators and editors; all other media and communication equipment workers.
12. **Healthcare Practitioners and Technicians Occupations** -- chiropractors; dentists; dietitians and nutritionists; optometrists; pharmacists; physicians and surgeons; physician assistants; podiatrists; registered nurses; audiologists; occupational, physical, radiation, recreational, respiratory and all other therapists; speech-language pathologists; veterinarians; all other health diagnosing and treating practitioners; clinical laboratory and diagnostic related technologists and technicians; dental hygienists; emergency medical technicians and paramedics; health diagnosing and treating practitioner support technicians; licensed practical and licensed vocational nurses; medical records and health information technicians; opticians; miscellaneous health technologists and technicians; other healthcare practitioners and technical occupations.
13. **Healthcare Support Occupations** -- nursing, psychiatric, and home health aides; occupational therapist assistants and aides; physical therapist assistants and aides; massage therapists; dental assistants; medical assistants and other healthcare support occupations.



14. **Protective Service Occupations** -- first-line supervisors/managers of correctional officers, police and detectives, and fire fighting and prevention workers; supervisors, protective service workers, all other; fire fighters; fire inspectors; bailiffs, correctional officers, and jailers; detectives and criminal investigators; fish and game wardens; parking enforcement workers; police and sheriff's patrol officers; transit and railroad police; animal control workers; private detectives and investigators; security guards and gaming surveillance officers; crossing guards; lifeguards and other protective service workers.
15. **Food Preparation and Serving Related Occupations** -- chefs and head cooks; first-line supervisors/managers of food preparation and serving workers; cooks; bartenders; food preparation and service workers, including fast food; counter attendants, cafeteria, food concession, and coffee shop; waiters and waitresses; food servers; dining room and cafeteria attendants and bartender helpers; dishwashers; hosts and hostesses, restaurant, lounge, and coffee shop.
16. **Building and Grounds cleaning and Maintenance Occupations** -- first-line supervisors/managers of housekeeping and janitorial, landscaping, lawn service, and groundskeeping workers; janitors and building cleaners; maids and housekeeping cleaners; pest control workers; grounds maintenance workers.
17. **Personal Care and Service Occupations** -- first-line supervisors/managers of personal service and gaming workers; animal trainers; nonfarm animal caretakers; child care, personal care and service, recreation and fitness, funeral service, and gaming workers; motion picture projectionists; ushers, lobby attendants, and ticket takers; miscellaneous entertainment attendants and related workers; barbers; hairdressers, hairstylists, and cosmetologists; baggage porters, bellhops, and concierges; tour and travel guides; transportation attendants; personal and home care aides; and residential advisors.
18. **Sales and Related Occupations** -- first-line supervisors/managers of sales workers; cashiers; counter and rental clerks; salespersons; advertising sales agents; insurance, securities, commodities, and financial service sales agents; travel agents; sales representatives; models, demonstrators, and product promoters; real estate brokers and sales agents; sales engineers; telemarketers; door-to-door sales workers, news and street vendors, and related workers; sales and related workers, all other.
19. **Office and Administrative Support Occupations** -- first line supervisors/managers of office and administrative support workers; clerks, including billing, posting, accounting, auditing, payroll, timekeeping, procurement, brokerage, correspondence, court, municipal, license, file, loan, new accounts, order, information, loan, record, postal service, mail, travel, shipping, receiving, traffic, stock, hotel, motel, resort desk, production, planning, expediting, insurance claims, policy processing, and office clerks; operators, including switchboard, telephone, communications equipment, mail processors, mail processing machine, and office machine operators; bill and account collectors; gaming cage workers; tellers; credit authorizers, checkers; customer service representatives; eligibility and loan interviewers; library assistants, clerical; human resources assistants; receptionists; reservation and transportation ticket, cargo, and freight agents; couriers and messengers; dispatchers; meter readers, utilities; postal service mail carriers and sorters; order fillers; weighers, measurers, checkers, and samplers, recordkeeping; secretaries and administrative assistants; computer operators; data entry keyers; word processors and typists; desktop publishers; proofreaders and copy markers; statistical assistants; other office and administrative support workers.
20. **Farming, Fishing, and Forestry Occupations** -- first-line supervisors/managers of farming, fishing, and forestry workers; agricultural inspectors; animal breeders; graders and sorters, agricultural products; miscellaneous agricultural workers; fishers and related fishing workers; hunters and trappers; forest and conservation workers; logging workers.



21. **Construction and Excavation Occupations** -- first-line supervisors/managers of construction trades and extraction workers; boilermakers; brickmasons, blockmasons, and stonemasons; carpenters; carpet, floor, and tile installers and finishers; cement masons, concrete finishers, and terrazzo workers; construction laborers; paving, surfacing, and tamping equipment operators; pile-driver operators; operating engineers and other construction equipment operators; drywall installers, ceiling tile installers, and tapers; electricians; glaziers; insulation workers; painters, construction and maintenance; paperhangers; pipelayers, plumbers, pipefitters, and steamfitters; plasterers and stucco masons; reinforcing iron and rebar workers; roofers; sheet metal workers; structural iron and steel workers; helpers, construction trades; construction and building inspectors; elevator installers and repairers; fence erectors; hazardous materials removal workers; highway maintenance workers; rail-track laying and maintenance equipment operators; septic tank servicers and sewer pipe cleaners; derrick, rotary drill, and service unit operators, oil, gas, and mining; earth drillers; explosives workers, ordnance handling experts, and blasters; mining machine operators; roof bolters, mining; roustabouts, oil and gas; helpers-extraction workers; other extraction workers.
22. **Installation, Maintenance, and Repair Occupations** -- first-line supervisors/managers of mechanics, installers, and repairs; repairers, including computer, automated teller, office machine, electric motor, power tool, electrical, electronics, electronic equipment, automotive body, home appliance, precision instrument and equipment, signal and track, and office machine repairers; installers and repairers, including electronic home entertainment equipment, radio and telecommunications equipment, automotive glass, control and valve, electrical power-line, and telecommunications line installers and repairers; avionics technicians; security and fire alarm systems installers; aircraft mechanics and service technicians; automotive service technicians and mechanics; bus and truck mechanics and diesel engine specialists; heavy vehicle and mobile equipment service technicians and mechanics; small engine, vehicle, and mobile equipment mechanics; heating, air conditioning, and refrigeration mechanics and installers; industrial and refractory machinery mechanics; maintenance and repair workers, general; maintenance workers, machinery; millwrights; coin, vending, and amusement machine servicers and repairers; commercial divers; locksmiths and safe repairers; manufactured building and mobile home installers; riggers; helpers-installation, maintenance, and repair workers; other installation, maintenance, and repair workers.
23. **Production Occupations** -- first-line supervisors/managers of production and operating workers; assemblers, including aircraft structure, surfaces, rigging, systems, electrical, electronics, electromechanical, engine, and other machine assemblers and fabricators; machine operators and tenders, including food and tobacco roasting, baking, drying, food cooking, shoe, textile bleaching and dyeing, packaging and filling, and cementing and gluing machine operators and tenders; machine setters, operators, and tenders, including extruding and drawing, forging, rolling, cutting, punching, press, drilling and boring, milling and planing, molding, plating and coating, textile cutting, textile knitting, weaving, textile winding and twisting and drawing out, extruding and forming, wood sawing, woodworking, chemical processing, extruding, forming, pressing, compacting, and paper goods machine setters, operators, and tenders; machine tool setters, operators and tenders, including drilling and boring, grinding, lapping, polishing, buffing, lathe, turning, and multiple machine tool setters, operators, and tenders; structural metal fabricators and fitters; bakers; butchers and other meat poultry, and fish processing workers; food batchmakers; computer control programmers and operators; machinists; metal furnace and kiln operators and tenders; model makers and patternmakers; welding, soldering, and brazing workers; heat treating equipment settlers, operators, and tenders; heat treating equipment setters, operators, and tenders, metal and plastic; layout workers; tool grinders, filers, and sharpeners; metalworkers and plastic workers, all other; bookbinders and bindery workers; job printers; prepress technicians and workers; printing machine operators; laundry and dry-cleaning workers; pressers, textile, garment, and related materials; sewing machine operators; shoe and leather workers and repairers; tailors, dressmakers, and sewers; fabric and apparel patternmakers; upholsterers; textile, apparel, and furnishings workers, all other; cabinet



makers and bench carpenters; furniture finishers; model makers and patternmakers, wood; woodworkers, all other; power plant operators, distributors, and dispatchers; stationary engineers and boiler operators; water and liquid waste treatment plant and system operators; miscellaneous plant and system operators; crushing, grinding, polishing, mixing, and blending workers; cutting workers; furnace, kiln, oven, drier, and kettle operators and tenders; inspectors, testers, sorters, samplers, and weighers; jewelers and precious stone and metal workers; medical, dental, and ophthalmic laboratory technicians; painting workers; photographic process workers and processing machine operators; semiconductor processors; cleaning, washing, and metal pickling equipment operators and tenders; cooling and freezing equipment operators and tenders; etchers and engravers; molders, shapes, and casters; tire builders; helpers—production workers; production workers, all other.

24. **Transportation and Material Moving Occupations** -- Supervisors, transportation and material moving workers; aircraft pilots and flight engineers; air traffic controllers and airfield operations specialists; ambulance drivers and attendants, except emergency medical technicians; bus drivers; driver/sales workers and truck drivers; taxi drivers and chauffeurs; operators, including motor vehicle, railroad brake, signal, switch, ship, conveyor, dredge machine, excavating machine, loading machine, hoist, winch, industrial truck, industrial tractor, pumping station, crane, tower, and shuttle car operators; locomotive engineers and operators; railroad conductors and yardmasters; subway, streetcar, and other rail transportation workers; sailors and marine oilers; ship and boat captains; ship engineers; bridge and lock tenders; parking lot and service station attendants; transportation inspectors; other transportation workers; conveyor tenders; cleaners of vehicle sand equipment; laborers and freight, stock, and material movers, hand; machine feeders and offbearers; packers and packagers, hand; refuse and recyclable material collectors; tank car, truck, and ship loaders; material moving workers, all other.
25. **Armed Forces** -- Military officer special and tactical operations leaders/managers; first-line enlisted military supervisors/managers; military enlisted tactical operations and air/weapons specialists and crew members; military, rank not specified.

For Further Information

For more information on definitions of variables from the 2000 Census and calculations used, see the Census Bureau site at www.census.gov and the U.S. Department of Transportation Census Transportation Planning Package 2000 website at www.fhwa.dot.gov/ctpp. Drill downs for any community or target market in the U.S. can be accessed through the Employment and Training Institute website at www.eti.uwm.edu.



The City of Milwaukee Department of City Development website (www.mkedcd.org/PurchasingPower) provides purchasing power reports for all 34 residential ZIP codes in Milwaukee County, including comparison tables, graphs, aerial photos, and density maps. The site also has contact information for companies interested in expanding or locating a business in Milwaukee.

Graduate students from the Heinz School of Public Policy and Management at Carnegie Mellon University prepared a PowerPoint presentation for developers, marketing flyers, and a market report detailing the opportunities for a grocery store in Pittsburgh's Hill District (which has been without a neighborhood supermarket since the 1980s). (See www.heinz.cmu.edu/systems/58.html) Another sample PowerPoint presentation outlines purchasing power and economic trends within a three-mile radius of Cesar E. Chavez Drive and W. National Avenue, a commercial district on Milwaukee's near southside. (See www.uwm.edu/Dept/ETI/purchasing/ChavezNational.pdf)



See also two discussion papers prepared by John Pawasarat and Lois Quinn for The Brookings Institution:

- **Exposing Urban Legends: The Real Purchasing Power of Central City Neighborhoods**, June 2001, (posted at www.brook.edu/dybdocroot/es/urban/pawasarat.pdf).
- **Tracking the Progress of Welfare Reform Quickly: A Model for Measuring Neighborhood Health and Change**, October 2001, (posted at www.brook.edu/dybdocroot/es/urban/publications/pawasaratquinn.pdf).

For background on changes in economic conditions and demographics in Milwaukee's Burleigh Main Street area, see the Employment and Training Institute reports on **Indicators of Employment and Economic Well-Being of Families in Central City Milwaukee Neighborhoods**, which have been prepared since 1998 and are supported by the Greater Milwaukee Foundation and the City of Milwaukee Community Development Block Grant Program. These studies track changes in family income, single parent and married parent families, poverty levels, business activity, housing values, neighborhood safety, transportation barriers, and receipt of public supports (including the earned income tax credits, public assistance, child care subsidies, food stamps, and medical assistance) for the CDBG and 9 zipcode areas (including 53210 and 53216 covering the Burleigh Main Street district). The studies are posted at www.uwm.edu/Dept/ETI/reports/indypage.htm.



Send comments to: Employment and Training Institute, University of Wisconsin-Milwaukee, 161 W. Wisconsin Avenue, Suite 6000, Milwaukee, WI 53203. Website: www.eti.uwm.edu. Email: eti@uwm.edu. Phone: 414-227-3380. Fax: 414-2273233.

