Abstract:

Genealogists often use census data to track movements of families through time and space, and to gain an understanding of the types of industries people worked in, as well as other details about people and communities. They also, for more modern information, use telephone books and printed directories for similar purposes. Geographers can make use of the same tools to track movements of populations – tracking migration into and out of an area as well as noticing trends that indicate retention and diffusion of cultural traits. As a snapshot of a community, this data could provide valuable information for businesses and local agencies in planning goods and services.

Procedure and Sources:

The "DEX" telephone book Yellow Pages for Olympia/Lacey/Tumwater from September 2008-2009 provided names and addresses for 220 local restaurants, including a few at the periphery of city limits. The data collected was then compared to online United States census data from 2000, to verify population totals as well as ages, ethnicities and levels of education. Additional demographics were obtained using the NAICS system, again from the census website. Google "Maps" was used to pinpoint locations of unfamiliar establishments. Restaurants were plotted onto the 2007 Rand McNally map "Streets of Olympia/Lacey/Tumwater." When mapping, a few places were outside urban boundaries, some were in residential areas. An additional map of the downtown Olympia core was used to better analyze the distribution in that densely packed area.

Some restaurants known to exist were not listed and therefore were not included, one was not able to be placed using the available maps, and some that were listed did not have addresses in the phone book so were not represented. All restaurants in the Yellow Pages with addresses were used,

even those that were known to be out of business by the time of this project. This method follows the results that an historical geographer or a person from outside the local area might obtain. It is however an unreliable sample due to the self-selected nature of Yellow Pages entries.

Results:

In Thurston County, the population was 205,355 in 2000°, of which 155,884 were characterized as living in urban areas. Lacey had 31,226 residents, Olympia had 42, 514, and Tumwater had 12, 698; for a total of 86, 438, or 55.% of the urban population of the county. These numbers do not include college students and others whose official residences are elsewhere, though they spend much of their year in this area. Following Washington state's demographics fairly closely, Thurston County as a whole had about 86% "White" population, with the largest minority group being Asian at 4.9% county-wide, and up to 7.8% in Lacey.

The categories chosen for the restaurants were: Asian, with teriyaki represented separately as a subset; European/American Standard and Homestyle restaurants; Cafes and Diners; Grills; Bars; Seafood; Mexican (excluded from this category were "fast food" style establishments); Italian; Pizza; Sandwich; Unknown; and Fast Food restaurants which was used to denote chain stores known for rapid service as well as "burger" restaurants. The largest single categories were Asian (50 total, of which 15 were teriyaki restaurants) and Fast Food which had 40 restaurants represented.

The breakdown of restaurant types is seen below. When the Asian and teriyaki restaurants are counted as one, they comprise a total 22.6% of the total. If all Asian, Sandwich, Barbecue, Pizza and Cafes/Diners are added to Fast Food, a total of 63.35% of restaurants are included. It is interesting to

[©] Raw data is from the United States Census Bureau, interpretations are the responsibility of the researcher alone. Please see appendices for the raw data.

note that sit-down dining, as one expects to find in European/American, Seafood and "Homestyle" restaurants is only 15.38%.

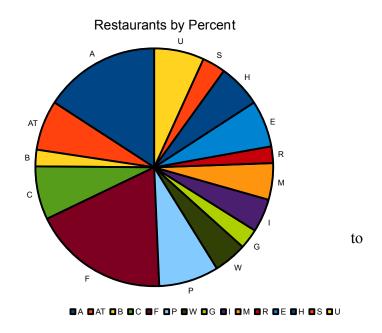
Туре	Number	% of Total		
Α	35	15.84%		
AT	15	6.79%		
B C F P W G	5	2.26%		
С	16	7.24%		
F	41	18.55%		
Р	18	8.14%		
W	10	4.52%		
G	6	2.71%		
l	10	4.52%		
М	11	4.98%		
R	5	2.26%		
R E H S	14	6.33%		
Н	13	5.88%		
S	7	3.17%		
U	15	6.79%		
Total	221	100.00%		

However, there is considerable cross-over between categories, with one restaurant listed as "fast food" though it also serves teriyaki. Some specialty and ethnic restaurants have their own categories, including Bars, Mexican, and Italian and so don't show up in the "sit-down" categories though many are not fast food. The restaurants that couldn't be easily characterized by name or Yellow Pages category (a separate listing) are listed under "Unknown."

type to the entire sample is shown in the next chart. The Asian restaurants are near the top, and the types proceed counter-clockwise down from there, with the Fast Food showing up at the bottom of the pie chart. It is important remember that not all restaurants within city limits for Olympia, Lacey and

Tumwater are represented.

The proportion of each



NAICS data from 2006 was obtained for the classification 72, Accommodations and Food, for the areas in zip codes 98501, 98502, 98503, 98506, 98512, 98513 and 98516, which cover Olympia,

Lacey and Tumwater postal addresses. Five categories in this group were represented in this project: 722110, Full-service restaurants; 722211, Limited-service restaurants; 72212, Cafeterias, buffets, & grill buffets; 722213, Snack and nonalcoholic beverage bars; and 722410, Drinking places (alcoholic beverages). The totals are represented in the table below.

NAICS	98501	98502	98503	98506	98512	98513	98516	Total per NAICS #	% of total
722110	51	20	20	13	9	0	19	132	36.77%
722211	42	24	26	12	6	4	18	132	36.77%
722212	12	3	0	0	1	0	1	17	4.74%
722213	0	15	12	4	8	1	12	52	14.48%
722410	13	5	1	3	2	0	2	26	7.24%
				·					
total per zip code	118	67	59	32	26	5	52	<u>359</u>	100.00%

Observations:

As expected, restaurant "clusters" tended for form in discrete areas, or along well-traveled routes. However, of the three institutions of higher education, only St. Martin's college seemed to have attracted significant numbers of restaurants on its periphery. There were only a couple places in walking distance of South Puget Sound Community College, and none near The Evergreen State College. However, Capital High School, Olympia High School and North Thurston High School had several nearby restaurants, perhaps due to their proximity to major thoroughfares and shopping.

There is a large cluster of almost exclusively Asian restaurants on Martin Way between Carpenter and Marvin Roads, and another in downtown Olympia. Downtown Olympia's business district also has a large percentage of upscale restaurants compared to other restaurant clusters. Restaurants in Lacey and Tumwater were generally spread out along thoroughfares and near intersections with the main freeway, rather than strictly in the business districts. As expected, the four major shopping districts (Capital Mall, the Trosper and Littlerock Road interchange, Southcenter Mall

and the Hawks Prairie area) had significant clustering of restaurants. A long line of restaurants proceeds along Martin Way from its origin in Olympia to its terminus at the Nisqually Delta.

The further from urban centers and clusters, the more likely a restaurant was to be "one of a kind," that is, the only one in its category, sometimes the only restaurant for miles. Franchises appeared to be spread out thinly, with one of each type per city or cluster. Primarily residential neighborhoods, by and large, were not magnets for restaurants.

Restaurants that were not listed in the Yellow Pages were not counted. This may have artificially skewed the results away from smaller establishments such as "Mom and Pop" diners or immigrant businesses that depend on word of mouth. It would be helpful to continue this research with additional data obtained from Employment Security, Business Licensing, and on-foot surveys. Given enough time, it would be reasonable to telephone or visit each restaurant to confirm categorization as well as location.

Using the NAICS data includes many restaurants that are not within the urban boundaries, as it is based on zip codes which extend far beyond urban boundaries. The total restaurants obtained by this method was 359, indicating that the telephone book survey contained just 62% of the licensed restaurants in the area. However, as the NAICS data was two years older than the telephone book, it is possible the actual gap is greater.

The population of Thurston county has a relatively high proportion of high school graduates, at nearly 90%, compared to statewide at 87.1%. In Olympia, the percentage is the highest in the county, at 91.6%, with 40.3% having at least a Bachelor's degree. In addition, 65.4% of the population is considered in the working age range, between 18 and 65 years old. 51% of the county's population is female, with a high of 52.2% female in both Lacey and Olympia.

Discussion:

This project looked at restaurants in Olympia, Lacey and Tumwater, Washington, using the Yellow Pages of a telephone directory from September 2008. It was expected that clear clusters of restaurants would form close to densely-packed residential areas, colleges, and business centers. It was also expected that fast food would be the highest category with "steak houses" or European-American cuisine coming in second, due to assumptions about the demographics of the population. Finally, the assumption was made that all or most restaurants would choose to be represented in the yellow pages of the telephone book.

It is difficult to tell, based on the NAICS data, whether Asian restaurants are the majority, though it appears that both full-service (sit-down) and limited-service (fast food) restaurants are, in reality, more equally represented than the telephone Yellow Pages demonstrate. Bars also were underrepresented in the telephone book, and some of the other classifications of NAICS were likely not differentiated in the categories designated for this project.

It would be interesting to track this type of data over time, using decennial census data, NAICS (or its predecessor, SIC) and phone books from every five years to see how quickly the restaurants respond to changes in demographics. The assumption would be that, as a particular demographic increases or declines, the restaurants that serve it will also flourish or decline, with a lag of a few years. However, it may be that as with many types of diffusion, once established in a community individual restaurants persist even when the original community has moved on or has been acculturated. It may also be found that, as members of the dominant community become acquainted with new cuisine they are more likely to patronize establishments.

In Chapter Ten of <u>The Human Mosaic</u>, restaurants are not mentioned until the discussion of the rise of the modern/Capitalist city in the 1800s. However, previous research indicates that inns, pubs

and various food stands existed in cities throughout history. Still, the change in residential patterns in the last two hundred years seems to have spurred a need for restaurants in specific areas, where business was conducted at a distance from homes (see page 358). The discussion of Cultural Diffusion in Chapter Eleven also carries this theme forward, of businesses and restaurants locating in specific areas due to finding both customers and mutual support. The peculiar American reliance on the automobile appears to have instigated the type of separation seen in this project between business/residence and restaurants, as seen in the widespread pattern along thoroughfares in addition to discrete clusters.

Historically, the Pacific Northwest, particularly the area between Vancouver, British Columbia, and Portland, Oregon, has had strong ties to Asian nations as trading partners. During and after various conflicts and wars, many servicemen who had been stationed overseas returned to their bases in the Puget Sound region with brides and sometimes their families. Both these factors could help account for the high number of Asian restaurants found in this project: both long-term familiarity with Asian cultures by non-Asians and immigration by people from Asian nations.

Conclusion:

It is apparent that a full-scale study would be more reliable, but this quick survey highlights some areas of interest and suggests hypotheses:

Restaurants tend to be located and clustered near areas of high traffic flow, more so than being
strictly located near high density population. If this is generally true, and if these businesses are
proven to be long-term (assumed profitable), then new business should locate in similar areas.
 This is a current trend locally, so perhaps this assumption has already been proved.

- Age of population seems to affect location and number of restaurants less than affluence,
 though there may be some differences in type of restaurants. It appears that younger
 populations tend to encourage more fast food and teriyaki/Asian restaurants, although some
 were found in the downtown Olympia core which is both a business district and a tourist
 destination. This could be a factor of price or efficiency, or both.
- Ethnic restaurants can survive and increase in number out of proportion to the people in the population who identify as that ethnicity. The percentage of Asian and teriyaki restaurants is at least three times the percentage of Asians in the population as a whole.
- Despite the predominance of Asian food, "traditional" American and European fare along with "fast food" is still widely available in the local area, both within the clusters of restaurants discussed and as stand-alone establishments. This makes sense, given the high "White" population and the aging nature of the local communities.

As has been noted, there is a confluence of familiarity and availability that appear to be in play in the Olympia/Lacey/Tumwater area. Where one restaurant is established, others are likely to follow. A variety of tastes and ethnicities are represented, with ethnic restaurants, especially Asian, represented in numbers disproportionate to the predominantly homogenous "White" population. It is also obvious that restaurants are under-represented in the Yellow Pages of at least some telephone books, rendering them almost invisible unless a person already knows the name of the establishment. For more reliable data sampling, another method and source should supplement or replace the Yellow Pages.

Bibliography

Jordan-Bychkov, Terry G., M. Domosh, R. P. Neumann, and P. L.Price. (2006) <u>The Human Mosaic</u>. New York: W.H. Freeman & Company.

R.H. Donnelley, Inc. <u>DEX telephone book</u>, (September 2008) "Olympia/Lacey/Tumwater and surrounding communities"

"Streets of Olympia/Lacey/Tumwater." (2007) Chicago: Rand McNally.

United States Census Bureau, (2000-2009). "State and County QuickFacts." http://quickfacts.census.gov/qfd/states/53000.html accessed 5/27/2009.

United States Census Bureau, (2009). "North American Industry Classification System." http://censtats.census.gov/cbpnaic/cbpnaic.shtml accessed 6/1/2009 and 6/2/2009.

United States Postal Service, (2009). "Zip Code Lookup." http://zip4.usps.com/zip4/citytown_zip.jsp accessed 6/2/2009.