Utah at the Beginning of the New Millennium
A Demographic Perspective

Chapter 20

Metropolitan Utah: Making the Desert Bloom
— with Ice Cream Parlors and Latte Stands

by Keith Bartholomew*

Like many states in the West, Utah’s population has been growing at rates well above national averages (Utah Quality Growth Commission 2001). Much of that growth has occurred in the state’s metropolitan areas along the Wasatch Front (Salt Lake City-Ogden and Provo-Orem). Not surprisingly, residents of these areas have expressed concern about how growth will affect the quality of their lives (Envision Utah 1997); local and state governments have been concerned about related impacts on infrastructure and fiscal health (QGET 1998). The purpose of this chapter is to look at metropolitan growth along the Wasatch Front during the 1990s, and to gain an understanding of how that growth may have affected various indices associated with quality of life. Included in the assessment are several objective measures—housing, land consumption, sprawl, transportation, and air quality—as well as a measure more subjectively associated with the author’s quality of life—the availability of doughnuts, ice cream, coffee, and beer.

Going to Town: Urban and Metropolitan Population Growth

Naturally, at the root of many of the concerns about growth are the basic facts about population increase. While it is certainly possible to experience growth in land consumption, sprawl, traffic congestion, and air pollution without having any growth in

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population (Cleveland did precisely that during the 1970s and 80s (Benfield 1999)), the perceived degradations in quality of life are more likely to occur, or to occur in a more exaggerated fashion, with an expanding population base. If land is being consumed and vehicles are being driven at greater rates per person (which is the case nationally (Benfield)), having more persons doing it would reasonably result in even greater increases. Hence, assessments of growth related impacts on quality of life are informed, to an important degree, by a review of the population growth scene.

Figure 20.1.

Any discussion of metropolitan growth in Utah needs to begin with a recognition that, despite its remote geographic location, Utah is one of the ten most urbanized states in the nation (Census Bureau 2000a). While the percentage of the country’s population as a whole continued its trend toward a more urbanized populace during the 1990s, Utah, already more urbanized than the rest of the county, maintained and increased its population focus in urban places. At the beginning of the decade, just over 75% of the nation’s population was classified as “urban,” while 87% of Utah’s population fell into that category (fig. 20.1). Throughout the decade, the U.S. urban population increased
19%, while its rural population declined 4% (fig. 20.2). In Utah, however, the urban population increased 31%, resulting in 2000 with almost nine out of every ten Utahns calling urban places “home.” This proportion would have been even higher if Utah had not bucked the national trend by having a notable increase in its rural population as well (17%).

### Utah Continues to Urbanize

![Graph showing population changes in Utah and the Mountain West](source)

**Figure 20.2.**

Interestingly, the increase in Utah’s urban population during the 90s was not as great as for the Mountain West (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming) (fig. 20.2). That group of states showed a growth rate of nearly two-fifths, seven percentage points higher than Utah’s. Rural growth in these states, while substantially higher than the U.S. average, was two percentage points lower than Utah’s. The net result is that while Utah still has a higher percentage of its population in urban places, the Mountain West states, as a group, are catching up (fig. 20.1).

Although there are urban areas sprinkled around the state (e.g., Vernal, Logan, Cedar City), it is not surprising that the primary focus for Utah’s urban population is along the Wasatch Front. The percentage of Utahns located in the state’s two principal
metropolitan statistical areas (MSAs)—Provo-Orem and Salt Lake-Ogden—was slightly higher than three-quarters in 1990 (77.5%) (Census Bureau 1990b). (Although Kane County, in southern Utah, is part of the Flagstaff MSA, it is not considered by many to be “metropolitan” in a qualitative sense, and will not be included in the data and discussion presented in this chapter. Also, in June 2003, the Census Bureau created additional MSAs in Utah, and reconfigured the state’s existing ones. As this book is about demographic changes in the 1990s, data relating to the new MSA designations will likewise not be included in this chapter.) This percentage slipped slightly during the decade, ending at 76.2% in 2000. While the drop is not substantial, the fact that it occurred during a period of strong statewide growth in urban population suggests that the Wasatch Front MSAs are beginning to lose ground to other urban parts of the state.

*Households vs. Housing: Left it to Beaver*

For many, the word “growth” refers primarily to population trends. From a land consumption point of view, however, trends in household formation can have a greater impact than population growth on quality of life issues. This is because the number of households in a region will determine, to a large degree, the number of housing units built, and that, naturally, affects the amount of land consumed for residential development. A population of a certain size grouping itself into a small number of large households will require fewer homes and, assuming a constant housing product mix, less land than the same population grouping itself into a larger number of smaller households.

On the other hand, smaller household types—e.g., single person, single parent, and “empty nesters”—are more likely to prefer smaller housing units (e.g., town homes, apartments, condos) than “traditional” families with two adults and several children. The degree to which the housing market matches these preferences can affect development densities and, hence, land consumption levels. A housing market that does not provide a range of smaller units at a level commensurate with the region’s share of smaller household types—i.e., is over-providing single-family detached homes—is
consuming more land, probably in a more dispersed pattern, than is necessary. This appears to be the case in metropolitan Utah.

Growth in the number of Utah households during the 1990s was slightly higher than the population growth rate (31% vs. 30%). In the state’s MSAs, however, the rates were nearly identical (both at 27.4%) (Census Bureau 2000b and 1990c).

Compared to national trends, the composition of Utah households in the 1990s was a mixed bag. While statewide, average household size dropped—as it did in the rest of the country—the rate was at about half of what the nation experienced (1% vs. 2%). This slightly widened the already substantial difference in the state and national number, putting the average Utah household at 3.13 persons compared to 2.59 for the U.S. (Census Bureau 2000c and 1990d). Households in metropolitan Utah painted a slightly different picture, with Provo-Orem posting a 1% decline—like the state as a whole—but off of a substantially higher number (from 3.63 to 3.59). Salt Lake-Ogden remained steady for the decade at 3.04.

Larger differences occurred in household types, particularly when measured in relative terms. During the 90s, the nation saw a 21% increase in the number of single-person households, increasing that segment’s comparative share 5% (fig. 20.3). In the Mountain West, however, the relative share of “single nesters” increased only a single percent. Metro Utah bucked the trend entirely, posting a 6% decrease, with a higher relative decline in Provo-Orem (-9%). Salt Lake-Ogden remained nearly steady, with a slight decrease of 1%.
The trend for “empty nesters” in Utah also ran contrary to national trends. While the country as a whole showed a 1% decline in the relative share for the “married without children” category, Utah posted a 7% gain, with Salt Lake-Ogden matching this number and Provo-Orem lagging a bit at 4%.

Where Utah tended to follow the nation was in the continued decline in the relative share of “Ozzie and Harriet” households—married with children. Nationally, the share of these households dropped 12%. In Utah, the share decreased 9% statewide, with a slightly higher figure for Salt Lake-Ogden and a much lower one for Provo-Orem. By the end of the decade, only one-third of Salt Lake-Ogden households fit the Ozzie and Harriet model, down from almost 37% at 1990 (fig. 20.4). While this figure is substantially higher than the national average of 23.5%, it is notably lower than the Provo-Orem and state averages (42.5% and 35%, respectively).
Importantly, this decline in the “traditional” family household may be widening the gap between the type of housing available in Utah’s metropolitan areas, and the type of households that live in those areas. Urban historians, architects, and planners have long noted that the rise of the single-family detached house in the post WWII era was twinned with a sharp increase in the number, and relative share, of households consisting of a husband, a wife, and children (Cohen 2003; Calthorpe 1993). Although the predominance of that household type has long since faded, the housing type continues to dominate our urban/suburban landscapes. In 2000, single-family detached dwellings comprised over 60% of the national housing stock (fig. 20.5).
In the Salt Lake-Ogden metro area, detached houses represented 65% of the region’s housing units in 1990, and climbed steadily throughout the decade, with more than 82% of new homes fitting that model (Dept. of Housing and Urban Development 2002, 2000). Hence, by the end of the decade, more than two-thirds of the Salt Lake-Ogden housing stock consisted of a housing type (single-family detached) that arguably was appropriate for only one-third of the region’s households (married with children). As a consequence, it appears that land in the region is being consumed for housing at a much faster rate than is necessary. In other words, if the housing and household types were better matched there would be only one-third of the units in the lower density single-family category, while the other two-thirds would be the more land efficient attached and multi-family units.
Land Development: Ranch Home on the Range

The actual data on land consumption is, frankly, somewhat mixed. One would anticipate that metropolitan Utah’s focus on single-family detached housing would be connected to substantial increases in the amount of developed land. As measured by the U.S. Department of Agriculture’s National Resource Inventory, the amount of developed non-federal land in Utah increased by 146,000 acres between 1987 and 1997, approximately 28% (Dept. of Agriculture 2000). While at first blush, this would appear to compare favorably with the state’s 1990-2000 urban population increase of 31%, the state’s performance lags substantially behind the Mountain West average. There, the region’s urban population increased by nearly 40%, while its area of developed land increased by almost half that amount (fig. 20.6).

Figure 20.6.

Nevertheless, at 2000, the Salt Lake urbanized area had a population density 18.2% higher than the average for central city urbanized areas in the Mountain West; Provo-Orem was 9.7% higher (Census Bureau 2000f). Salt Lake’s housing unit density, however, was only 1.6% higher than the Mountain West average and Provo-Orem’s was
23.3% lower. These discrepancies in population and housing densities are almost certainly explained by Utah’s substantially higher average household size, noted above. A possible sign of increasing development spread in Utah is the growth of “hobby farms”—large acreage residential development frequently found at the fringes of urban areas. While overall, Utah’s farmland acreage declined by only 2.2% between 1997 and 2002, the number of so-called farms in the 1 to 9 acre range increased by almost 15% (fig. 20.7). At the same time, farms in the 50 to 500 acre range declined by approximately the same percentage. The percentage of farms in Utah smaller than 50 acres went from 50% to 54% in just 5 years (Dept. of Agriculture 2004). This shift in acreage to smaller farms, particularly those less than ten acres, suggests an increase in “ex-urban” sprawl—residential development for urban commuters masquerading as farms (Daniels 1999).

**Change in Utah Farms by Acreage Class**

![Change in Utah Farms by Acreage Class](image)

**Figure 20.7.**

Although land consumption is an important factor in assessing quality of life issues, there are other measures that are also important. Frequently mentioned factors in
the literature on land use sprawl include land use mixing, street connectivity, and the strength of activity centers and downtowns.

Land use mixing refers to the degree to which different land uses are either mixed together in a common urban fabric, or are segregated into single-use enclaves. Extreme examples might include the central business district of a downtown, on the one hand, and a large housing subdivision, on the other. The degree to which land uses are mixed has been connected to the amount that people use automobiles, with higher levels of auto use in the more segregated areas, and lower levels in the more mixed areas (Ewing, Pendall, and Chen n.d.).

Street connectivity is the degree to which streets are connected at regular intervals. Street patterns that are well-connected tend to provide a wider variety of route options for car travelers, thereby dispersing traffic over a wider area, and more direct routes of travel for pedestrians, bicyclists, and transit riders (1000 Friends of Oregon 1993).

The relative strength of activity centers and downtowns is correlated to a region’s degree of compactness. The stronger the activity center/downtown, the more compact the community is likely to be, and hence, less sprawled (Ewing, Pendall, and Chen).

A recent study of these and other factors shows the Salt Lake-Ogden region performing reasonably well on the first two measures, compared to 82 other metro areas in the US. Based on a scale with the average value equaling 100, the Salt Lake City region was slightly above average on land use mixing (103.16) and considerably above average in street connectivity (117.04). Compared to other Mountain West metro areas, however, Salt Lake’s performance was not quite as impressive (fig. 20.8). Moreover, Salt Lake’s ranking on centeredness was notably below average (along with Phoenix’s). This finding is consistent with census data, showing a small—and declining—share of the region’s population located in the central city, with explosive growth in the suburbs (fig. 20.9).
Figure 20.8. Sprawl Indices

Figure 20.9. Movin' to the 'Burbs
Transportation: Here, There, and Everywhere

Analyses of quality of life almost universally include some measure of transportation effectiveness. As in many regions in the U.S., residents of the Salt Lake, Ogden, and Provo urbanized areas are increasingly reliant on automotive transportation. Taken as a whole, the three urbanized areas—which the census bureau defines as the areas of the region containing a population density of at least 1000 persons per square mile—saw average daily vehicle miles of travel (VMT) rise from 22.08 million in 1990 to 34.16 million in 2000, a 54.7% increase (fig. 20.10). That is more than double the rate of population increase for those areas during the same period (26.8%). The increase in VMT was not evenly spread between the three areas, however. Salt Lake City had the lowest increase at 34.5%, followed by Ogden at 82.4%. Provo-Orem more than doubled its daily VMT, posting a whopping 120.6% increase (fig. 20.11).

![More People Driving More Miles](image-url)

Figure 20.10.

The correlation between these increased driving levels and increased population is weak, at best. Salt Lake’s low VMT increase is matched with the lowest rate of population increase among the three areas (12.4%). Ogden, however, experienced a much higher rate of population increase (61.3%) than Provo-Orem (37.7%), but did not see VMT increase at a rate even close to the latter’s.

Measured on a per capita basis, the Salt Lake urbanized area maintained the highest amount of VMT throughout the decade (19.2 in 1990 and 23 in 2000), but Provo-Orem almost caught up, increasing its VMT per person from 13.8 in 1990 to 22.1 in 2000—an increase of more than 60%. In the end, the picture painted by the data shows Salt Lake City with the highest amount of driving, but with Provo-Orem increasing at the highest rate.

The frequency with which metro Utahns chose to drive to work started the decade high, and increased further. In 1990, 75.2% of workers in the three urbanized areas drove alone to work (Census Bureau 1990e). This increased by a slight amount (1.4%) by 2000 (fig. 20.12). Once again, however, the degree of change was not the same
across all three areas. As before, Provo-Orem led the way with a 3.6% increase, while Salt Lake City remained essentially the same (fig. 20.13). The decade ended with well over three-quarters of metro Utahns driving to work (fig. 20.14).

Change in Mode to Work in Metro Utah

![Chart showing change in mode to work in Metro Utah]

Source: Census Bureau 2000h, 1990e.

Figure 20.12.

Change in Mode by Area

![Chart showing change in mode by area]

Source: Census Bureau 2000h, 1990e.

Figure 20.13.
More dramatic differences were observed in the amount of transit ridership between the three urbanized areas. The share of transit commuters in Provo-Orem declined by more than 25% during the decade, while Salt Lake City and Ogden posted noticeable gains (fig. 20.13). In Salt Lake, the increase was likely due, in part, to the 1999 opening of the region’s first light rail line from Sandy to downtown Salt Lake City. That occurrence appears to explain the substantial increases in regional transit ridership observed beginning in 1999 and continuing through 2002 (fig. 20.15).
Figure 20.15.

The amount of time it took to get to work increased during the 1990s, with mean travel times rising 10-12% in the urbanized parts of the state to a range of 18 minutes in Provo and 22.5 minutes in Salt Lake. These averages are still well below U.S. and Mountain West levels (fig. 20.16), placing Utah 11th in the nation for shortest commute time (Perlich 2003). Nevertheless, notable increases did occur in the percentage of workers commuting more than 30 minutes, with more than one-quarter of workers in the Salt Lake urbanized area traveling that long (fig. 20.17).
Workers experiencing longer commute times were likely confronted to some degree with increased traffic congestion. Between 1982 and 2001, the percentage of freeway lane miles in the Salt Lake City region that were typically congested during
rush hour increased from 10% to 50% (fig. 20.18). While the resulting levels are still below national averages, they are considerably higher than the average for “medium” sized cities, the category within which Salt Lake was classified. The degree to which these increased levels were affected by the Interstate 15 reconstruction was not apparent from the data.

**Congested Freeways**

![Diagram of congested freeways](image)

Figure 20.18.

The overall transportation picture in metropolitan Utah is one of important increases in transit ridership against a background of substantial increases in car driving and traffic congestion. However one measures changes in quality of life, it is clear that more of life in metro Utah was spent behind the wheel in 2000 than ten years previous.

Air Quality: On a Clear Day You Can See the Kennecott Smokestack

Increased levels of auto travel give rise to questions about air pollution. Utah has several areas that are in “non-attainment” status for federal air quality standards. Salt Lake City, Ogden, and Utah County are in non-attainment for particulate matter; the Provo area is in non-attainment for carbon monoxide (CO). While automobiles are
involved in the production of both pollutants, their role in the former is mainly indirect and their impact in the latter is geographically localized.

Cars play a more direct—and regional—role in the production of ground-level ozone. Ozone (O3) is a pollutant resulting from the combination under high temperature conditions of oxides of nitrogen and hydrocarbons, both of which are emitted by automobiles. While Salt Lake and Davis counties had been classified as non-attainment for ozone in 1977, steady reductions in the levels of the pollutant in the 1980s and 1990s (fig. 20.19) led to the region’s achievement of attainment status in 1997. Changes in vehicle technology and policies requiring vehicle inspection and maintenance are largely credited for this result (Department of Environmental Quality a). In the face of increasing population levels and driving rates, however, the ability of the region to continue to rely on those interventions is somewhat in doubt (Department of Environmental Quality b).

**Figure 20.19.**

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Ozone and Temperature: 1982-2001
Quality of Life: Doughnuts, Ice Cream, Coffee, and Beer

Quality of life is not just about land, transportation, and air. It also includes a number of more personal, subjective attributes. For this author, quality of life encompasses easy access to four basic food groups: doughnuts, ice cream, coffee, and beer. In the opinion of some, the presence of retail establishments trading in these commodities can do a great deal for—or reflect a significant degree about—the health and welfare of a neighborhood or community. One Salt Lake City developer, in fact, is reported to have used walking proximity to an ice cream shop as a heuristic standard for measuring neighborhood access to a broader array of daily retail needs.

Amusingly, the U.S. census bureau keeps track of these things. Actually, the bureau groups the first three items—doughnuts, ice cream, and coffee—under a category called “snack & nonalcoholic beverage bars.” The fourth item—beer and other alcoholic drinks—gets its own category: “drinking places.”

The most current data on the number of these establishments show that Utah is substantially behind the rest of the country and the rest of the Mountain West. The state averages only 11.65 snack and beverage establishments per 100,000 persons, compared to slightly more than 18 for the nation and just above 16.5 in the Mountain West (fig. 20.20). Put another way, Utah has 36% fewer snack and beverage establishments per person than the national average; 29% fewer than the Mountain West. The situation is slightly less dire in the Salt Lake City-Ogden MSA, where there are 12.85 establishments per 100,000 potential doughnut/ice cream/coffee consumers. On the other hand, Provo-Orem is suffering an apparent snack food drought with only 8.79 establishments per 100,000.
The Four Food Groups

![The Four Food Groups Diagram]

Source: infoUSA 2003; Census Bureau 2004.

Figure 20.20.

The comparisons are even more drastic with respect to beer. Utah averages fewer than eleven-and-a-half drinking places per 100,000 persons, 54% and 59% below the national the Mountain West figures, respectively. Again, the number is somewhat higher in the Salt Lake-Ogden region. Provo-Orem, however, is much more extreme, with only 3.01 establishments per 100,000—approximately 89% below national and Mountain West averages.

Given Utah’s religious and historic context, the low numbers are not terribly surprising for drinking places. It is, however, somewhat curious that the state is so far behind its peers in ice cream and the like. One might be tempted to attribute this to the snack and beverage category’s inclusion of coffee, another commodity whose consumption is discouraged by the state’s dominant religion. A separate calculation of just ice cream establishments, however, indicates a deficit for that sub-category that is comparable to the one for the broader classification of snacks and beverages (fig. 20.21).
This would suggest that the numbers for the broader category cannot be solely due to the “coffee factor.”

Ice Cream in Zion

![Ice Cream in Zion](chart.png)

Source: infoUSA 2003; Census Bureau 2004.

Figure 20.21.

**Conclusion**

Generally, the trends in metropolitan Utah during the 1990s largely appear to have followed the direction, if not magnitude, of the rest of the country. The state’s population as a whole continued to urbanize, as it did in the rest of the nation, but at a much higher level. The state’s metro households joined the national shift away from the “Ozzie and Harriet” model toward a broader parity in household composition. Again, however, the state remains substantially above the nation in that category. The apparent mismatch between household type and housing type in Utah also mirrors national conditions. Utah’s rate of land consumption likewise fell within U.S. averages. On transportation issues, metropolitan Utah is moving consistently with the rest of the
country—toward much higher levels of driving. Here, however, the state’s metro areas appear to have more in common with the sprawled regions of Arizona and California than with the older, more compact cities of the East. Where metro Utah really lags behind the rest of the country is in providing those quality of life indicator species: doughnuts, ice cream, coffee, and beer.

References


— — —. 1990f. Travel time to work. 1990 Summary tape file 3, table P050.

