

## II.A. Lincoln, Nebraska

The City of Lincoln, Nebraska and the City of Madison, Wisconsin are similar in a lot of aspects. Both are capitals of their respective states, both are home to large state-run public universities, both are found in cool climates, and both are known for having abundant parkland. Lincoln has ten city-run public pools, Madison has zero. This is a striking disparity between two cities that have so much in common. There is no clear, definitive answer of why this is. Many different viable factors come into play. In an analysis of this issue we used three different themes to compare and contrast these two cities, including physical geography, income and taxes, and age distribution, and looked for correlations between the two cities to attempt to discover what brings about this disparity.

### Physical Geography

Average Summer High Temperatures (Fahrenheit)						
	May	Jun	Jul	Aug	Sep	Summer Avg.
Lincoln	73.8	84.9	89.6	87.1	78.8	82.68
Madison	69.4	78.3	82.1	79.4	71.4	76.12
Average Summer Precipitation (inches)						
	May	Jun	Jul	Aug	Sep	Summer Avg.
Lincoln	4.2	3.5	3.5	3.4	2.9	3.5
Madison	3.1	3.8	4	3.9	3.1	3.58

(from [www.usatoday.com](http://www.usatoday.com), [www.hprcc.unl.edu](http://www.hprcc.unl.edu) and [mcc.sws.uiuc.edu](http://mcc.sws.uiuc.edu))  
Figure 1.1

Madison and Lincoln are both north central US cities with relatively similar climates. This region of the country is known for cool, short summers, and long, harsh winters. Madison, located at 43° 08' N of the equator, is farther north and naturally not as mild as Lincoln, which is located at 40° 50' N. In Figure 1.1, the average high

temperatures and precipitation are charted for the five summer months of the year as these are the months that public pools could be open. As the chart shows, Lincoln on average is approximately 7° F warmer than Madison. Looking at average summer precipitation, the two cities are similar, with Lincoln being just slightly more arid than Madison. The warmer and slightly drier climate in Lincoln suggests a greater need for public pools in the city, as they can be open longer and the warmer temperatures would promote more use.

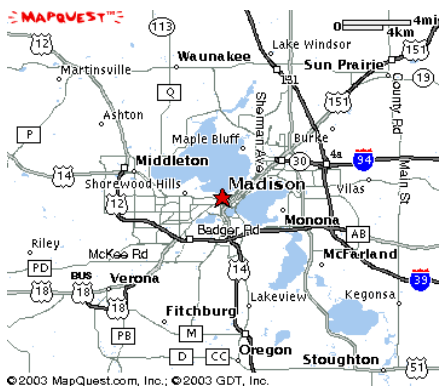


Figure 1.2a (www.mapquest.com)

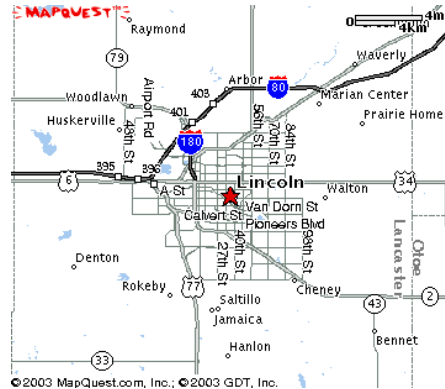


Figure 1.2b (www.mapquest.com)

While the climates of these two cities are similar, the geography of the locales is very different (see Figures 1.2a & b). Madison is located amongst the lakes and hills of south central Wisconsin and there are three large lakes located within the city itself, Lake Mendota, Lake Monona and Lake Wingra. These lakes allow for Madison to have plentiful public beaches and parks on the lakeshore. 13 lakeshore beaches are currently run by the city of Madison Parks Division. Contrarily, Lincoln is located in the Great Plains, and sits among a couple of manmade reservoirs (Capitol Beach Lake) a few small creeks (Oak Creek, Salt Creek), but no natural lakes. While Madison has beaches, Lincoln has no real natural place for the public to congregate, socialize and swim. This is

crucial when analyzing the disparity in public pools in the two cities. In Lincoln, public pools are used to fill a niche that is naturally filled by lakes in Madison.

### **Income Distribution and Taxes**

Tax Rates in Madison, WI and Lincoln, NE

	Madison	Lincoln
Sales Tax	5.50%	7%
Income Tax Bracket		
Highest	6.75%	6.84%
Lowest	4.60%	2.56%
Avg. Property Tax (Tax per \$1,000 of market value)	\$22.81	\$19.86

Figure 1.3  
(from money.cnn.com)

The City of Lincoln has a comparable tax rate to Madison (see Figure 1.3). Since the cities have comparable tax rates, it is surprising to see that Lincoln has so many city-run public pools and Madison has none. The City of Lincoln annually devotes \$900,000 from its budget to run the public pools. Most of the outdoor pools remain open from around Memorial Day to mid or late August, and receipts from admission fees, season passes, program registration fees and pool rentals account for 50% of the budget (<http://www.ci.lincoln.ne.us>). This means the city loses about \$450,000 a year running the public pools, as they cost more to run than the city makes from running them. Due to recent budget crunches, the city has had to cut back on pool hours for a handful of the ten city-run public pools, saving the city a lot of money. The City of Madison, in 2003, devoted \$233,972 to running public beaches in the city (<http://www.ci.madison.wi.us>). These costs include erecting docks and piers, hiring lifeguards, and running concessions at the beaches. This past summer, the beaches opened on June 7 and closed September 1. This is about average annually, as the beaches remain open for approximately the same

time period as the City of Lincoln has its public pools open. The beaches are free of charge, while the City of Lincoln charges an entrance fee at the gates of its pools.

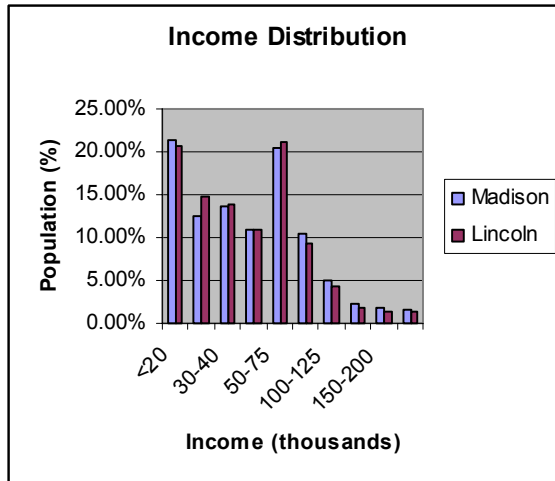


Figure 1.4a ([www.ersys.com](http://www.ersys.com))

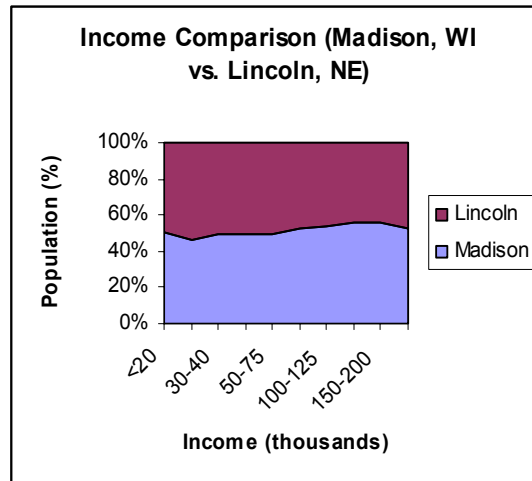


Figure 1.4b ([www.ersys.com](http://www.ersys.com))

As you can see in Figures 1.4a & b, Lincoln has a generally poorer population than Madison. At the very bottom of the scale, Madison slightly edges Lincoln, but this is due to the large number of college-aged persons. In the middle class, Lincoln has a slight edge; this is because of the larger number of middle aged families living in the city. While both cities have a large middle-class percentage of population, Lincoln has a much higher lower class percentage of its population, with income in the range from \$20,000 to \$30,000, making the general population of Lincoln slightly poorer. The average annual household income in the City of Lincoln is \$44,082, versus \$45,620 in Madison ([money.cnn.com](http://money.cnn.com)). The public pools in Lincoln cater to the slightly poorer population. Although Madison has no public pools, there are numerous private neighborhood and country club style swimming pools, such as Farm Hills and Shorewood Hills. It can be expensive to join these private pools as they cater to the slightly more well off population

found in Madison. Looking at income distribution, you would expect to find more public pools in Lincoln than in Madison.

### Age Distribution and Households

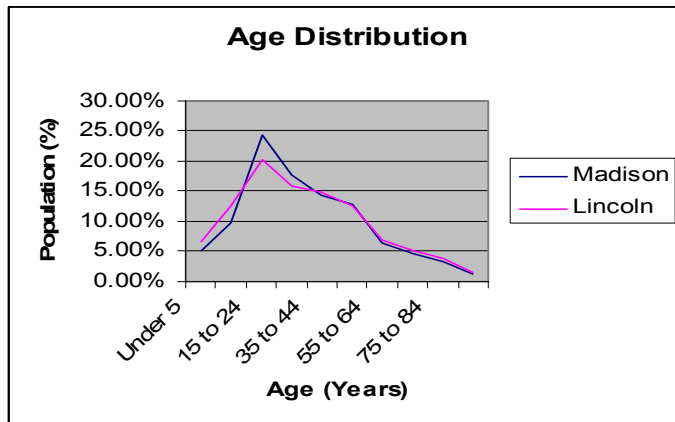


Figure 1.5 (www.areaconnect.com)

Observing Figure 1.5, you can see that Lincoln has a higher percentage youth population and a slightly higher percentage elderly population, but Madison has a much higher college age and middle aged adult population. This is largely due to the main campus of the University of Wisconsin, with 40,000 plus students, being located in Madison. While the main campus of the University of Nebraska is located in Lincoln, the school is significantly smaller, with approximately 20,000 students. Due to this large college age population, Madison has a younger median age (30.6 years) than Lincoln (31.3 years). Lincoln has a much higher youth population under the age of 18 (23.01% vs. 17.91%) and a slight edge in elderly population over 65 (10.42% vs. 9.22%). From this more evenly distributed population implies Lincoln is more family-oriented than Madison, with more people living with a spouse, children and/or other blood related persons. The census reveals proof of this. In Lincoln, family households make up 59.21% of city households, versus only 47.7% in Madison (www.areaconnect.com).

With no beaches or other public aquatic areas, public pools are needed and are geared towards this family oriented population, as many families, especially those with younger-aged children, would utilize the public pools. Due to the higher percentage of population of college aged students in Madison, pools are not as necessary, as this segment of the population is not as likely to utilize the resource as other segments.

### **Conclusion**

With a slightly warmer climate, no natural lakes in the area, comparable taxes, a lower average income, and a family oriented population, it can be expected that Lincoln would have more public pools than Madison, as in general the population has a greater need. Nonetheless, the cities remain very similar as the differences between the two cities are only slight, and no one factor is strikingly different enough to validate such a great disparity between the two in the number of city run public pools. If Lincoln has 10 public swimming pools, one would expect Madison to be not far behind.

## **Sources and Bibliography**

<http://www.cdc.noaa.gov>

<http://www.ci.madison.wi.us>

<http://www.ci.lincoln.ne.us>

<http://money.cnn.com/best/bplive>

<http://www.areaconnect.com>

<http://madisonwi.areaconnect.com>

<http://lincolnne.areaconnect.com>

<http://www.mapquest.com>

<http://www.lincoln.org>

<http://www.lcoc.org>

<http://www.ersys.com>

<http://www.usatoday.com>

<http://www.hprec.unl.edu>

<http://mcc.sws.uiuc.edu>