

Public Transportation & Earnings in Memphis

August 15, 2014

Public transportation, or the lack thereof, has an important impact on the earnings capacity of people. In Memphis, this is an important impact. The following tables and graphs show the stark differences in earning between those who use public transportation in Memphis and in the rest of the U.S. While the data show that the availability of public transportation affects the earning capacity of people in general, Memphis shows very low earnings for those who use public transportation when compared to the difference of those who drove in Memphis to the earnings of those who drove in the U.S. in general. Simply put, the differences between those who drove in Memphis and the U.S. are not as great as the differences in median earnings between those who used public transportation in Memphis and in the U.S. It is also important to note that while the median earnings in Shelby County are higher in general and closer to the U.S. median, earnings for those who use public transportation in Shelby County are as low as for those who use public transportation in Memphis.

This matters because low earnings impact poverty rates and the ability of the population to engage in sufficient economic activity for economic development in the entire region.

Table 1 – Comparison of “Drive to Work” and “Use Public Transportation” Median Earnings in the U.S., Tennessee, Shelby County, and the City of Memphis.

Median Earnings in the Past 12 Months	United States	Tennessee	Shelby County	Memphis
Overall	32,417	30,486	31,471	26,809
Drove to Work	35,132	31,345	34,469	30,152
Used Public Transportation	30,950	18,606	16,323	16,323

Figure 1 – Comparison of “Drive to Work” and “Use Public Transportation” Median Earnings in the U.S. and the City of Memphis.

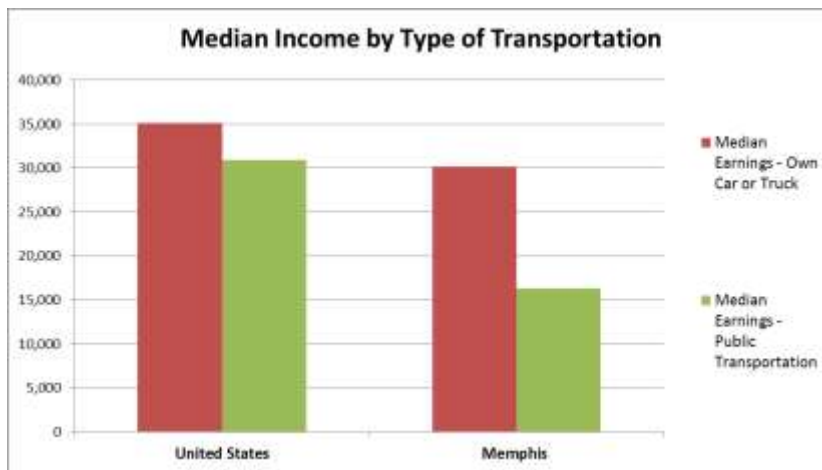


Table 2 – Comparison of “Drive to Work” and “Use Public Transportation” Median Earnings in Memphis and other MSAs with Populations over 1,000,000.

Median Earnings in the Past 12 Months	Memphis, TN-MS-AR Metro Area	Chicago-Joliet-Naperville, IL-IN-WI Metro Area	Atlanta-Sandy Springs-Marietta, GA Metro Area	Baltimore-Towson, MD Metro Area	Pittsburgh, PA Metro Area	Detroit-Warren-Livonia, MI Metro Area
Overall	31,719	37,033	35,413	41,348	34,728	34,437
Drove to Work	34,199	39,315	37,426	45,514	36,544	36,837
Used Public Transportation	16,450	39,727	20,989	25,018	29,022	14,609

Note that the median earnings for those who used public transportation are much higher in several MSAs. Detroit is also included to highlight the importance of public transportation to economic development.

Statistical Notes:

There are statistically significant differences in median earnings for those who rely on public transportation among cities with subway or light rail systems ($t=4.804$, $p=.000$), and cities with transportation scores greater than 50 ($t=4.125$, $p=.001$) and greater than 60 ($t=6.287$, $p=.000$).

Transit scores are positively correlated with median wages for those who use public transportation ($r=.606$, $p=.000$), those who drive to work ($r=.580$, $p=.000$), and average median wages ($r=.515$, $p=.001$).

Transit scores are negatively correlated to the difference in the median wages of those who use public transportation and the average median wage of the population ($r=-.700$, $p=.000$); that is, the difference between the median wages of those who use public transportation and the overall median wage increases without a subway and/or light rail.

Table 3 – Comparison of “Drive to Work” and “Use Public Transportation” Median Earnings by Selected Characteristics.

	Median Earnings Overall	Median Earnings - Drive to Work	Median Earnings - Public Transportation
Average Median Earnings (102 MSAs) - MSAs with Population over 500,000	33,504		
MSAs WITH Subway or Light Rail (N=26)	42,659	45,591	40,770
MSAs WITHOUT Subway or Light Rail (N=76)	32,931	35,037	17,736
MSAs with Transit Scores HIGHER than 50 (N=13)	39,411	42,120	32,448
MSAs with Transit Scores LOWER than 50 (N=89)	32,641	34,714	17,140
Average Median Earnings - MSAs with Population over 1,000,000 (51 MSAs)	35,483		
MSAs WITH Subway or Light Rail (N=26)	37,419	39,949	27,786
MSAs WITHOUT Subway or Light Rail (N=25)	33,621	35,639	16,571
MSAs with Transit Scores HIGHER than 50 (N=13)	39,713	42,255	33,320
MSAs with Transit Scores LOWER than 50 (N=38)	34,181	36,366	18,606

The Department of Social Work in the School of Urban Affairs and Public Policy at the University of Memphis is dedicated to understanding poverty and its causes through research and engaged scholarship. Our purpose is to identify the most effective ways to eliminate poverty and promote social and economic development for our region. If you would like more information on Memphis poverty, please contact Dr. Elena Delavega at mdlavega@memphis.edu

Sources

U.S. Census 2012 ACS 1 Year Estimates, B08121 (Median earnings in the past 12 months (in 2012 inflation-adjusted dollars) by means of transportation to work)
 Walk Score (2014). Transportation score. Retrieved from (<http://www.walkscore.com/cities-and-neighborhoods/>)
 Tables and charts by the author