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## The Role of Public Transportation in Youngstown

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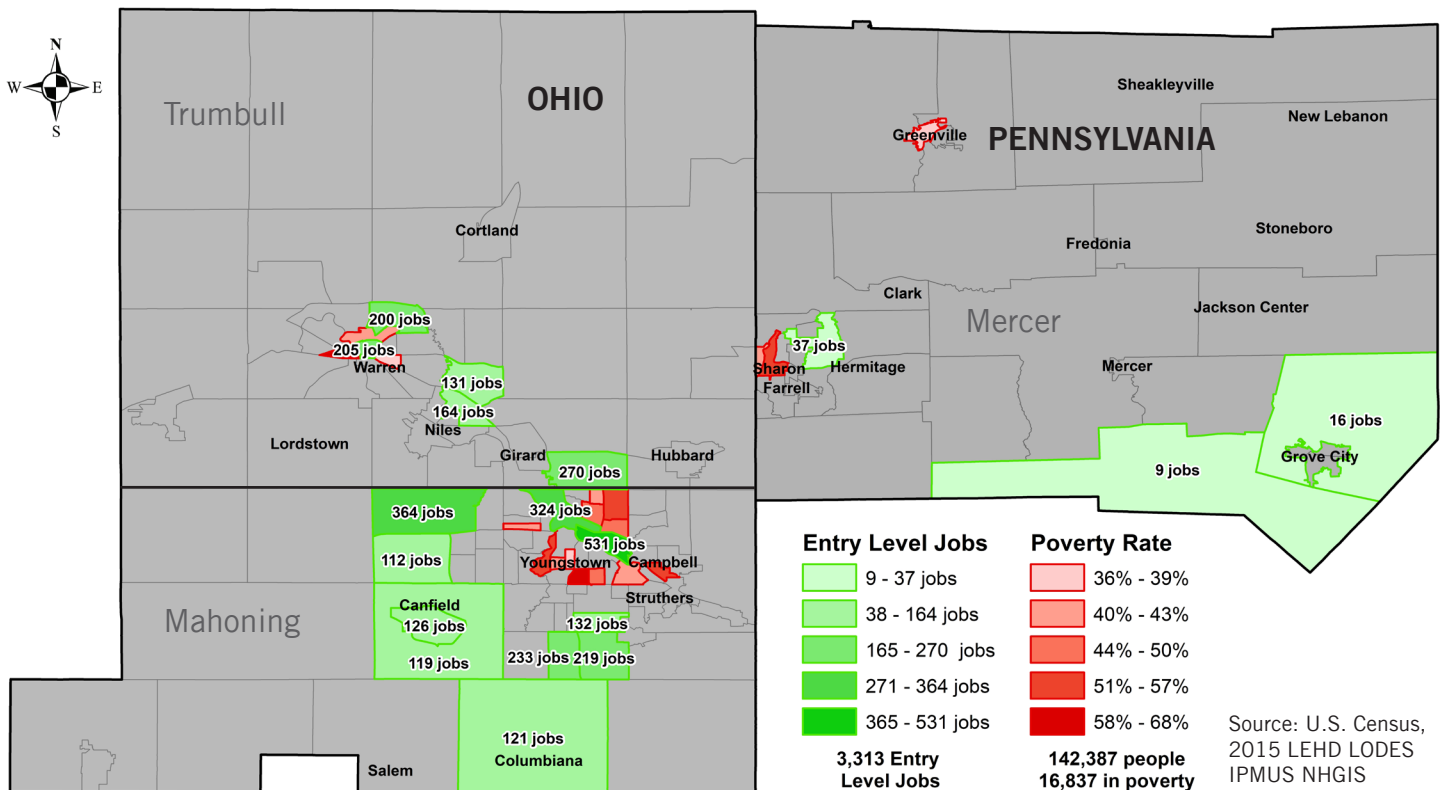
Public transportation is an essential component of regional infrastructure. For many, inadequate, inaccessible, or unaffordable transportation is a significant barrier to employment. Improved transit access leads to a decline in poverty and employment growth because it connects vulnerable, marginalized, and low-income people to jobs. The Center for Economic Development produced this research brief to demonstrate how an increase in public transit services in the Youngstown area may expand job opportunities. Currently, very few residents in the region use public transit; only 1% of residents rely on public transport for work commute compared to 5% of workers nationally.<sup>1</sup>

When public transit options are limited, a car becomes a necessary part of life to maintain employment. However, car owners are subject to the costs of fuel, maintenance, insurance, parking, which consume a significant portion of household income. Many household budgets become overextended on automobile costs, which can potentially crowd out other priorities such as health care, education, and saving.<sup>2</sup>

In 2018, every third resident in Youngstown earned income lower than the living wage (\$21,715), the amount a single person must make to support themselves.<sup>3</sup> Every sixth resident had an annual income below the poverty threshold (\$12,784).<sup>4</sup> In addition, low income perpetuates the problem because it may force car buyers into payments that are higher, or for terms longer than ideal, to make them more affordable.

Income is a persistent issue in Northeast Ohio, particularly in Youngstown, as the region lost good-paying manufacturing jobs in recent years, which were replaced by low-wage service sector jobs. In a 5-month period (November 2018 through March 2019), General Motors terminated 1,607 jobs in Youngstown, resulting in a loss of \$269 million in earnings and over \$3 billion of output in automobile-related industries.<sup>5</sup> At least 600 people lost their jobs within a few weeks amid the COVID-19 pandemic.<sup>6</sup> In combination with the employment losses over the last decade, the region has seen declining population trends as people leave the area in search of work.<sup>7</sup>

**MAP 1: ENTRY-LEVEL JOB HUBS AND HIGH POVERTY CENSUS TRACTS IN THE YOUNGSTOWN MSA**



<sup>1</sup> U.S. Census Bureau (2018). Commuting to work. 2018 ACS 1-year Data Profiles. / <sup>2</sup> LeBeau, P. (October 14, 2014). New study says most can't afford used cars. CNBC.

<sup>3</sup> An hourly wage of \$10.44 according to the MIT Living Wage Calculator. / <sup>4</sup> Poverty threshold per one person in 2018.

<sup>5</sup> Lendel, I., Piazza, M., & Ellerbrock, M. (2019). Lordstown GM Plant Closure Economic Impact Study. Urban Publications.

<sup>6</sup> Based on voluntarily reports under the Worker Adjustment and Retraining Notification (WARN) Act.

<sup>7</sup> Ohio and the U.S. gained population from 2014 to 2018 (0.4% and 2.6%, respectively), and Youngstown's population decreased by 2.6%.

This research focuses on the highest-poverty census tracts in the Youngstown area (Map 1).<sup>8</sup> These areas are highlighted in shades of red, getting darker as poverty rates increase.<sup>9</sup> They outline very distressed neighborhoods with up to almost 70% of the population living in poverty. An estimated 142,387 people lived in these areas in 2015, 16,837 lived in poverty. Highlighted red census tracks also had the highest prevalence of workers with no vehicles (Map 2).

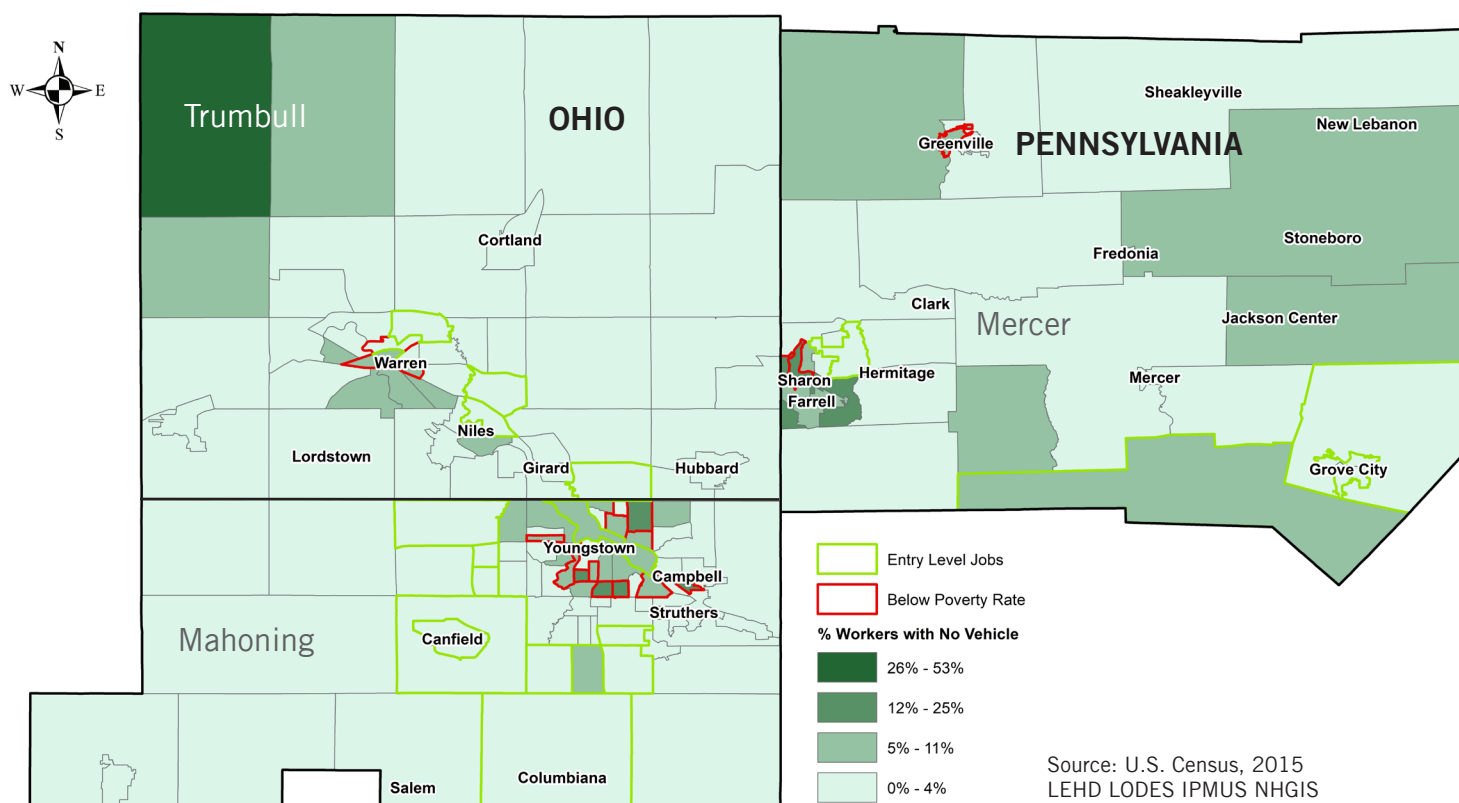
Riders with no vehicles or no driver's license (including low-income workers and people with disabilities) rely on public transit to get to work, school, doctor appointments, the grocery store, and local amenities. Map 3 shows bus service lines providing rides in the Youngstown area. The Western Reserve Transit Authority (WRTA) provides bus services in Mahoning County and connects the cities of Youngstown and Warren via the Warren Express bus line. WRTA buses operate daily, Monday through Saturday, on twenty-one fixed routes, and during weekday evening hours on six nightline routes. The Shenango Valley Shuttle Service (SVSS) operates on five routes connecting the cities of Sharon, Farrell, and Hermitage. Both WRTA and SVSS are public transit systems providing its services with the assistance of local, state, and federal funding. In 2020, before the pandemic, WRTA increased fixed bus services within the city of Warren. Six routes passed by retail locations, major employers, and medical centers.

This was an important step towards a more integrated regional labor market in which more workers have access to a greater number of jobs.

Further improvements in public transit services may be particularly crucial for economic recovery in the Youngstown area. A study of displaced workers-residents in eight states bordering the Great Lakes, including Ohio showed that the duration of a new job search after a displacement declines with increased accessibility to appropriate jobs.<sup>10</sup> More than 5,000 displaced workers (a 2.1% increase) were able to find a new job within the first quarter of job search with greater job access.<sup>11</sup>

Map 1 also shows the census tracts with the highest number of entry-level jobs in shades of green; color is darker as the number of those jobs increases. The green tracts represent entry-level job hubs. Job hubs are characterized by a high concentration of entry-level jobs and employers. Of the 3,313 entry-level jobs, 1,125 jobs (34%) were located in downtown Youngstown, near the areas with the highest concentration of poverty. These entry-level jobs paid \$1,250 per month and included cashiers, waiters, dishwashers, hotel clerks, housekeeping cleaners, bakers, hairdressers, or laundry workers, among others. Although the map only shows the number of filled jobs, new jobs are likely to appear in or very close to the job hubs.

**MAP 2: WORKERS LIVING IN NO-VEHICLE HOUSEHOLDS**



<sup>8</sup> A census tract generally has a population size between 1,200 and 1,800 covering a contiguous area.

<sup>9</sup> The poverty rate measures the percentage of people whose income fell below their assigned poverty threshold. Poverty thresholds are assigned to individuals or families based on family size and composition.

<sup>10</sup> Principal cities included Minneapolis-St. Paul, Milwaukee, Chicago, Indianapolis, Detroit, Columbus, Cleveland, Pittsburgh, and Buffalo.

<sup>11</sup> Job access was defined in terms of employment levels discounted by person-specific morning commute time. In Andersson, F., Haltiwanger, J. C., Kutzbach, M. J., Pollakowski, H. O., & Weinberg, D. H. (2018). Job displacement and the duration of joblessness: The role of spatial mismatch. *Review of Economics and Statistics*, 100(2), 203-218.

The Center compared driving time and transit travel time in a morning rush hour from each of the low-income census tracts to each of the entry-level job hubs.<sup>12</sup> On average, if a prospective employee has a car, they can reach their prospective workplace in 25 minutes. Transit travel time increases to 136 minutes, including walking, if an employee were to use public transit.<sup>13</sup> For example, it takes 8 minutes to travel by car from a census tract with the highest poverty level (68%) to a census tract with the highest number of filled entry-level jobs (531 jobs). When using public transit, commute time increases to 43 minutes (28 minutes in transport and 15 minutes walking). This lengthy commute might discourage potential employees from considering a job, and the employer is less likely to fill the position.

Using a statistical model, we further analyzed the relationship between public transit availability and employment in the entry-level job hubs, controlling for the socioeconomic attributes of each highlighted (green and red) census tract. While transit travel takes significantly longer (on average) than driving (as seen across the U.S.), our findings show that relatively faster public transit travel is affiliated with a higher number of low-income residents working in the entry-level job hub. ***On average, if we decrease the public transit travel time by 10 minutes, 224 more residents of each low-income census tract will have access to the entry-level job hubs in Youngstown.*** Nearly 4,500 people (a 6.7% increase) will have better employment opportunities as a result.

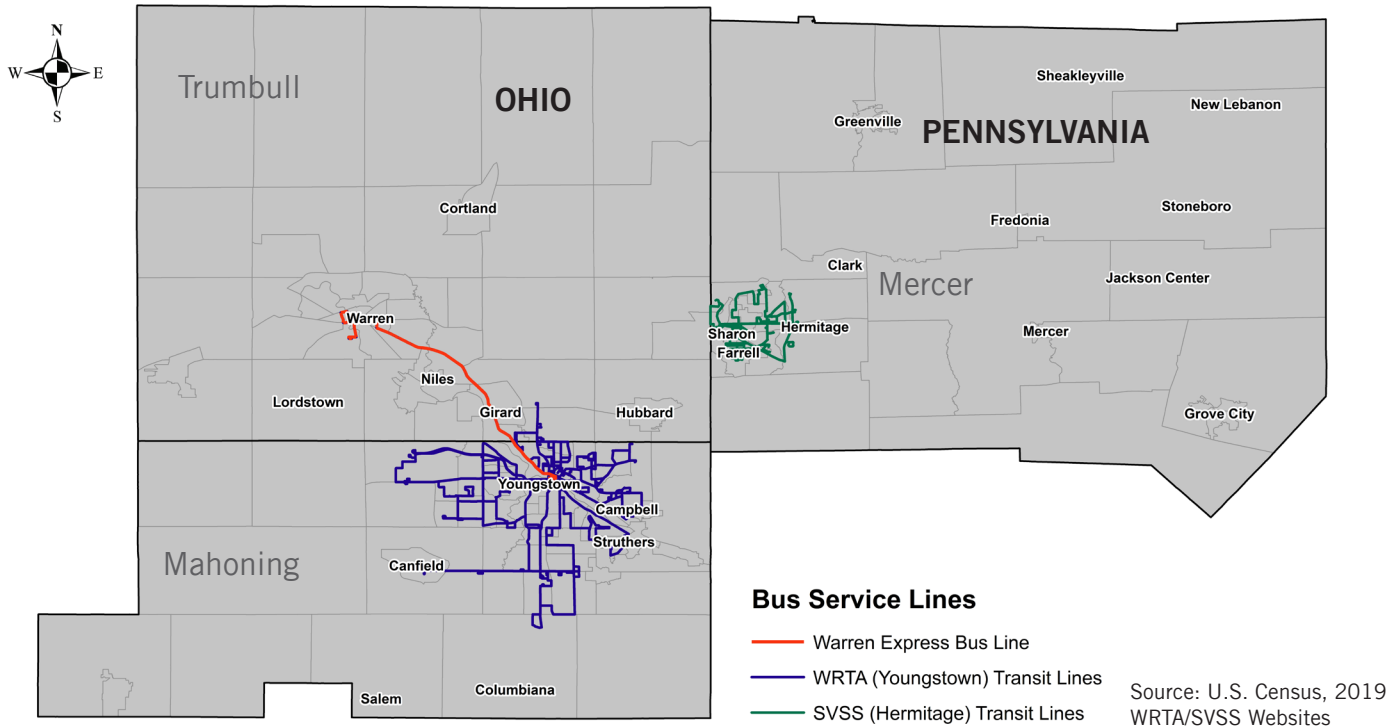
These findings point toward an important contribution of public transportation in improving peoples’ quality of life. Overall, our model shows that without access to public transportation many people in disadvantage areas lose prospective employment. Investments in public transit are likely to yield desirable outcomes such as poverty-reduction and upward social mobility through employment gains.

Many transit agencies are experiencing major disruptions to normal operating procedures because of the COVID-19 pandemic. WRTA is expected to suspend all fixed routes due to dramatic reductions in ridership. Public transit services are essential for health care workers, first responders, and grocery and pharmacy workers, as well as medical transportation for kidney dialysis, cancer treatments and other critical care. The Coronavirus Aid, Relief, and Economic Security Act (CARES Act) recognizes the importance of public transportation organizations by providing \$25 billion to prevent, prepare for, and respond to COVID-19. ■

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Please share your comments with  
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MAP 3: BUS SERVICE LINES



<sup>12</sup> Using Longitudinal Employer-Household Dynamics (LEHD) data on workers residing in high-poverty census tracts commute to work.  
<sup>13</sup> Travel time is set to 200 minutes, when census tracts have no connection by public transit and/or walking.