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The association of commuting time and wages for American workers with disabilities

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Abstract.
BACKGROUND: Transportation research suggests that persons who travel further to work earn higher hourly wages.
OBJECTIVE: To explore whether workers with disabilities who have longer commute times earn higher wages.
METHODS: Data from the 2016 American Community Survey is used to examine commuting time and wages for workers with and without disabilities, controlling for individual characteristics.
RESULTS: Travel time to work is quite similar between workers with and without disabilities, but workers with disabilities who travel similar amounts of time as workers without disabilities earn substantially less per hour, even when controlling for individual characteristics.
CONCLUSIONS: Commuting time does not contribute to the wage gap between workers with and without disabilities.

Keywords: Transportation, commuting, wage, American community survey

1. Introduction

Although persons with disabilities are significantly less likely to be employed than persons without disabilities, approximately 35 percent of working-age people with disabilities do work (Sevak et al., 2015). As transportation is a frequently cited barrier to employment for persons with disabilities, it is important to examine how workers with disabilities are commuting to work. Relying on certain modes of transportation might significantly limit proximity to high quality employment options, while also reducing the level of flexibility that might be required to accommodate non-standard work schedules. Regardless of mode of transportation, limiting the travel radius from home due to disability may affect the availability of job opportunities and specific employment outcomes such as earnings levels. In addition, the associations between transportation patterns and employment may vary by disability type. Using data from the American Community Survey, the research presented here addresses these gaps in the literature.

In 2016, 35% of civilians with disabilities aged 18–64 were employed (Lauer & Houtenville, 2017). Most (66%) employees with disabilities worked full-time in 2017 (U.S. Department of Labor, 2017). In general, workers with disabilities have been found to engage in lower paying jobs that are more likely to have non-standard work schedules than workers without disabilities (Maroto & Pettinicchio, 2014). A mix of individual worker characteristics including educational attainment and broader structural factors such as policies, labor market conditions, and employer discrimination explain much of this employment

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disadvantage (Yelin & Trupin, 2000). Transportation issues may come into play as well, although research on the transportation patterns of workers with disabilities has thus far been lacking.

Research conducted on the general population has found that household decisions about where to reside and work involve making trade-offs among wages, commuting time, and living costs. So, Orazem & Otto (2001), for example, suggest that average wages for commuters should exceed average wages for non-commuters, holding all other things equal. Indeed, workers that commute further have been found to earn higher wages (Blumenberg & Fields, 2013; Madden & Chiu, 1990; Rapino & Fields, 2013). Certain sociodemographic characteristics are associated with commuting time. Female workers, for example, generally have shorter commute times than men (Haley-Lock, Berman, & Timberlake, 2013). Further research has found that shifts in available jobs from urban to suburban areas, combined with housing market limitations and poor transportation linkages, result in low-wage job seekers having limited opportunities for employment in their local areas (Blumenberg & Shiki, 2004; Phillips, 2014; Weber & Duncan, 2000).

Many of the factors mentioned above may impact travel burden for persons with disabilities. Prior research suggests that persons with disabilities are more likely to work in part-time or contingent positions than other persons and, despite hours worked, are likely to earn less (Marato & Pettinicchio, 2014; Schur, 2003; U.S. Department of Labor, 2017). These factors would suggest that persons with disabilities have shorter travel times to work, as they are likely to work in lower-paying jobs.

Lastly, some research has focused on mode of transportation as it relates to employment. Prior research suggests that people that use cars are more likely to travel further to work compared to those who use a bus (Farber & Paez, 2010). Overall, job accessibility by public transit has been found to be significantly related to levels of employment (Thakuriah, 2011; Yi, 2006), although this finding does not hold true for all populations. Access to transit and employment concentrations has been found to have no significant impact, for example, on employment outcomes for welfare recipients in six metropolitan areas (Sanchez et al., 2004). Special transportation services such as paratransit do exist, although reported use is low, particularly for workers (Loprest & Maag, 2001; NCD, 2015). The timeliness and reliability of such services has been called into question, which may explain the low levels of use

Based on the literature reviewed above, we will examine several research questions as noted below.

1) Do workers with disabilities have shorter commute times than workers without disabilities, controlling for individual characteristics and mode of transportation?
2) Do workers with different types of disabilities experience differences in commute times, controlling for individual characteristics and mode of transportation?
3) Do workers with and without disabilities who experience similar commute times earn similar hourly wages, controlling for individual characteristics?

2. Method

2.1. Data

We used publicly available data from the 2016 American Community Survey (ACS). The ACS is the annual household survey conducted by the U.S. Census Bureau. The survey captures a range of information about housing, population, and the workforce. Information about commuting time to work is included as well. We restricted our sample to employed adults aged 18 to 64 (Unweighted N = 1,439,070) and weighted our data to adjust for the complex sampling design used in the ACS.

2.2. Measures

2.2.1. Dependent variables

Travel time: The ACS does not collect information about the actual distance traveled to work. We instead used a proxy of commuting distance: commuting time. In the ACS, the transportation time variable measures "the total amount of time, in minutes, that it usually took the respondent to get from home to work last week." This continuous variable has a skewed distribution, with 75% of weighted responses being 1 to 34 minutes, but with responses ranging up to 165 minutes. Other transportation researchers have addressed such skewed travel time data by creating categorical 'long trip' variables (Jacoby, 1991; Ricketts et al., 1997; Trowbridge & McDonald, 2008). We followed this approach, creating a "long trip" variable that equaled one if the trip time was in the top quartile (35 minutes or more) and a zero otherwise.

Hourly wage: The ACS collects information about pre-tax earned (salary) income from the previous 12 months as well as the usual hours of work per week. We used these two variables to construct an hourly wage variable. As the hourly wage variable was highly skewed, we used the logarithm of this measure as our dependent variable in our hourly wage regressions.

2.2.2. Independent variables

Sociodemographic variables: We included standard sociodemographic variables that have been found to be associated with employment: age, educational attainment, metropolitan status, race and sex. We created a categorical variable for education, including the following groups: Less than high school, high school, some college, Bachelor's degree or more. We coded persons identified as in the metropolitan area, central/principal city as one and persons residing in other areas as zero. Race included the following categories: White, Black, American Indian/Alaskan Native, Asian and Other.

We also included a measure of full or part-time employment status, based on usual hours worked during the past week. Persons working 35 hours or more during a week were considered full-time employees.

Disability was included as a key demographic variable. The ACS includes six questions that gather information about activity, functional, and sensory limitations. For our analyses, a person who responded positively to any one of these questions was included as a person with a disability. When examining differences across types of disabilities, we focused our analysis on persons having *only* one of the six functional (ambulatory, cognitive), sensory (hearing, vision), or activity (independent living, self-care) limitations as well as persons having more than one type of disability (ambulatory, cognitive, hearing, vision, self-care, and/or independent living).

Mode of transportation: As mode of transportation can influence travel time, we included covariates for types of transportation in our regressions of travel time. The ACS collects information for the following transportation to employment: 1) auto, truck or van; 2) motorcycle; 3) bus or trolley bus; 4) streetcar or trolley car; 5) subway or elevated train; 6) railroad; 7) taxicab; 8) ferryboat; 9) bicycle; 10) walked only; 11) other; 12) worked at home. For our analysis, we collapsed travel types into five groups: private vehicle (auto, truck, van, motorcycle), public transportation (bus or trolley bus, streetcar or trolley car, subway or elevated train railroad, ferryboat), taxicab; other (bicycle, walked only, other); and worked at home. We excluded persons working from home from our regression analyses.

2.3. Analytical plan

We first ran descriptive statistics of our sample. We tested for differences in sociodemographic and travel characteristics by disability status using Chi square. Next, we ran a series of regressions. We ran two logistic regressions of 'long travel time', controlling for the covariates listed above with one key difference. The first model used the 'any disability variable' and the second model used the 'disability type' variables. Results are reported as odds ratios. These models generally followed the specification below:

F indicates the outcome of interest (long commute time) of individual i who lives in location j.

F_{ij} is a function of his or her underlying disability (H_{ij}), individual characteristics (X_{ij}), mode of transportation (Z_{ij}), and unobservable factors (e_{ij}) as follows:

$$F_{ij} = \mathrm{f}\left(\mathrm{H_{ij}}; X_{ij}; Z_{ij}; e_{ij}\right)$$

For the analysis conducted here, X contained age, center city residence, educational attainment, full or part-time employment, race, and sex and Z contained separate dummy variables for modes of transportation, with private vehicle as the reference group.

Third, we ran an ordinary least squares (OLS) regression of the log of average hourly wage. We used individual weights and robust clustering by Public Use Microdata Areas (PUMAs) to account for wage differences that might vary within different areas of the country. PUMAs are statistical geographic areas that nest within states or other entities. The regression followed the specification noted below:

Y indicates the outcome of interest (log of hourly wage) of individual i who lives in location j.

Y_{ij} is a function of his or her underlying disability (H_{ij}), individual characteristics (X_{ij}), long commute time (T_{ij}), and unobservable factors (e_{ij}) as follows:

$$Y_j = a + \mathrm{B}_1 H_j +; \mathrm{B}_2 X_{ij} + \mathrm{B}_3 T_{ij} + e_{ij}$$

X contained age, center city residence, educational attainment, race, and sex.

Again, this regression was conducted using two different models, one that included 'any disability' and one that included 'disability types', in addition to the covariates listed above. Coefficients and standard

errors are reported. In addition, the final equations to predict hourly wages are provided and used to demonstrate wage differences by disability status, holding all else constant.

3. Results

3.1. Descriptive results

Table 1 shows the sociodemographic characteristic of the sample. Nearly six percent of working-age employed adults had a disability. Some differences in characteristics were noted by disability status. Persons with disabilities were older and had lower levels of educational attainment than people without disabilities. In terms of employment, 68 percent of workers with disabilities worked full-time (35 hours or more per week). In contrast, 79 percent of workers without disabilities worked full-time.

Table 2 shows basic travel characteristics of our sample. While most employees took a private vehicle (85.6%) to work, five percent used public transportation. Five percent worked at home. Significant differences were noted by disability status. Persons with disabilities were less likely to use private vehicles and were slightly more likely to use public transportation to travel to and from work. Persons with disabilities were also slightly more likely to use other forms of transportation (six percent) than persons without disabilities (four percent). Of particular note is that very few American workers, regardless of disability status, reported using public transportation (five percent).

The mean travel time to work was 27 minutes. Twenty-three percent of workers traveled 35 minutes or more to work with little variation by disability status.

3.2. Travel time logistic regression results

Table 3 shows results from two of our travel time logistic regressions, addressing our first two research

Table 1
Characteristics of working-age employed persons, 2016 American Community Survey (weighted N = 151,543,722)

		Total		Disability		No Disability		p
Characteristic	Indicator	%	s.e.	%	s.e.	%	s.e.	
Disability	No disability	94.15	0.02	–		–		
	Any disability	5.84		–		–		
	Ambulatory only	0.17	0.00	–		–		
	Cognitive only	1.08	0.01	–		–		
	Hearing only	1.39	0.01	–		–		
	Independent living only	2.02	0.01	–		–		
	Self-care only	0.09	0.00	–		–		
	Vision only	1.04	0.01	–		–		
	More than one	0.05	0.00	–		–		
Sex	Male	52.66	0.03	54.01	0.20	52.58	0.03	0.000
	Female	47.34	0.03	45.99	0.20	47.42	0.03	
Race	White	74.13	0.04	76.52	0.19	73.98	0.04	0.000
	Black	11.74	0.03	12.41	0.15	11.70	0.03	
	American Indian/Alaskan Native	0.67	0.01	1.09	0.04	0.65	0.01	
	Asian	6.02	0.02	3.11	0.07	6.21	0.02	
	Other	7.43	0.03	6.86	0.12	7.47	0.03	
Age groups	18–24	14.45	0.03	10.98	0.15	14.64	0.03	0.000
	25–34	23.71	0.04	16.21	0.18	24.13	0.04	
	35–44	22.03	0.04	16.79	0.20	22.33	0.04	
	45–54	22.60	0.03	26.48	0.20	22.38	0.03	
	55–64	17.21	0.03	29.55	0.25	16.52	0.03	
Educational attainment	Less than HS	8.00	0.03	10.60	0.15	7.84	0.03	0.000
	HS or equivalent	32.28	0.05	39.93	0.19	31.80	0.05	
	Some college	25.64	0.04	26.69	0.20	25.57	0.04	
	Bachelor's or more	34.09	0.05	22.79	0.18	34.79	0.05	
Usual hours worked	Full-time	78.55	0.05	67.98	0.19	79.20	0.05	0.000
	Part-time	21.45	0.05	32.02	0.19	20.80	0.05	
Metropolitan status	In center city	11.19	0.03	9.72	0.11	88.72	0.03	0.000
	Not	88.81	0.03	90.28	0.11	11.28	0.03	

s.e. = standard error

Table 2
Travel characteristics of workers by disability status, 2016 American Community Survey

		Total		Disability		No Disability		p
Characteristic	Indicator	%	s.e.	%	s.e.	%.	s.e.	
Mode of transportation	Private vehicle	85.55	0.03	82.65	0.17	85.68	0.03	0.000
	Public transportation	5.13	0.02	5.53	0.10	5.11	0.02	
	Taxi	0.15	0.00	0.29	0.02	0.14	0.01	
	Other	4.18	0.02	5.72	0.11	4.09	0.02	
	Worked at home	5.04	0.02	5.82	0.09	4.99	0.02	
Travel time (of commuters)	In minutes (mean)	27.40	0.03	27.37	0.11	27.40	0.03	0.766
Long trip (35 minutes or more)	Yes	22.70	0.05	21.01	0.17	22.80	0.05	0.000
	No	77.30	0.05	78.99	0.17	77.20	0.05	

s.e. = standard error

Table 3
Logistic regression of long travel time (> = 35 minutes) to work, 2016 American Community Survey

		Model 1			Model 2		
		Odds Ratio	s.e.	p	Odds Ratio	s.e.	p
Characteristic	Indicator						
Disability status	No disability (reference)	–	–	–	–	–	–
	Any disability	0.99	0.01	0.175	–	–	–
	Ambulatory only	–	–	–	1.01	0.07	0.878
	Cognitive only	–	–	–	0.97	0.02	0.179
	Hearing only	–	–	–	0.97	0.02	0.231
	Independent living only	–	–	–	0.98	0.02	0.186
	Self-care only	–	–	–	0.94	0.08	0.481
	Vision only	–	–	–	1.04	0.03	0.123
	More than one limitation	–	–	–	0.72	0.12	0.051
Mode of transportation	Private vehicle (reference group)	–	–	–	–	–	–
	Public transportation	7.31	0.09	0.000	7.31	0.09	0.000
	Taxi	0.48	0.05	0.000	0.48	0.05	0.000
	Other	0.45	0.01	0.000	0.45	0.01	0.000
Usual hours worked	Part-time (reference)	–	–	–	–	–	–
	Full-time	1.64	0.01	0.000	1.63	0.01	0.000
Age	Age (years)	1.01	0.00	0.000	1.01	0.00	0.000
Sex	Female (reference)	–	–	–	–	–	–
	Male	1.30	0.01	0.000	1.30	0.01	0.000
Race	White (reference)	–	–	–	–	–	–
	Black	1.09	0.01	0.000	1.09	0.01	0.000
	American Indian/Alaskan Native	0.95	0.03	0.118	0.96	0.03	0.118
	Asian	1.19	0.01	0.000	1.19	0.01	0.000
	Other	1.16	0.01	0.000	1.16	0.01	0.000
Educational attainment	Less than HS (reference)	–	–	–	–	–	–
	High school	1.06	0.01	0.000	1.06	0.01	0.000
	Some college	1.17	0.01	0.000	1.17	0.01	0.000
	Bachelor's or more	1.35	0.01	0.000	1.35	0.01	0.000
Metropolitan status	Not (reference)	–	–	–	–	–	–
	In center city	0.92	0.01	0.000	0.92	0.01	0.000
Constant		0.11	0.00	0.000	0.11	0.00	0.000

s.e. = standard error

questions. The first model in Table 3 uses 'any disability' as the disability indicator. The second model uses separate dummy variables to indicate each type of disability as well as persons with more than one type of disability. Persons without a disability were the reference group. When controlling for individual characteristics, mode of transportation, and full- or part-time status, the presence of any disability was

not associated with a longer commute time. Similarly, individual types of limitations were not associated with longer commute times.

Both models show that men were significantly more likely than women to have a long commute time to work (OR: 1.30; $p < 0.001$) and that full-time workers were more likely to have long commutes than part-time workers (OR: 1.64, $p < 0.001$). Compared to those with less than a high school education, persons with higher levels of education had significantly higher odds of having long commutes. Respondents who lived in center cities were significantly less likely to have long commute times (OR:0.092; $p < 0.001$). Mode of transportation was significantly associated with commute time as well, as people who took public transportation to work were significantly more likely to have long commute times than those who used a private vehicle (OR: 7.31; $p < 0.001$).

3.3. Wage results

Table 4 addresses our final research question, showing results of the log of hourly wage OLS regressions. Having a disability was significantly associated with lower levels of wages, even when controlling for travel time and other factors. For the general population, having a long commute was associated with higher wages.

In both models, being female, nonwhite, and having less than a high school education were associated with lower earnings.

Table 5 presents estimated hourly wages by disability status and commute time, holding all else constant and controlling for geographic differences. Estimates are based on the average person with a disability in the sample of employed adults. A hypothetical average case of a 49 year old white high school educated male who had a disability and a short commute from a non-center city location with a disability would earn $12.28per hour. A similar person without a disability would earn $16.09 per hour. A wage gap between workers with and without disabilities exists, even for workers who have longer commute times ($14.56 for workers with disabilities, $19.07 for workers without disabilities). Differences in wages are presented by activity, functional and sensory limitation as well.

Table 4
OLS regression of natural log of hourly wage, 2016 American Community Survey

		Model 1			Model 2		
Characteristic	Indicator	Coeff	s.e.	*p*	Coeff.	s.e.	*p*
Disability status	No disability (reference)	—	—	—	—	—	—
	Any disability	–0.27	0.00	0.000	—	—	—
	Ambulatory only	—	—	—	–0.27	0.02	0.000
	Cognitive only	—	—	—	–0.36	0.01	0.000
	Hearing only	—	—	—	–0.20	0.01	0.000
	Independent living only	—	—	—	–0.31	0.01	0.000
	Self-care only	—	—	—	–0.32	0.03	0.000
	Vision only	—	—	—	–0.20	0.01	0.000
	More than one limitation	–	–	–	–0.07	0.06	0.229
Long travel time (>30 minutes)	No (reference)	–	–	–	–	–	–
	Yes	0.17	0.00	0.000	0.17	0.00	0.000
Age	Age (years)	0.02	0.00	0.000	0.02	0.00	0.000
Sex	Female (reference)	–	–	–	–	–	–
	Male	0.26	0.00	0.000	0.26	0.00	0.000
Race	White (reference)	–	–	–	–	–	–
	Black	–0.15	0.01	0.000	–0.15	0.01	0.000
	American Indian/Alaskan Native	–0.11	0.01	0.000	–0.11	0.01	0.000
	Asian	0.01	0.01	0.519	0.01	0.01	0.519
	Other	–0.07	0.01	0.000	–0.07	0.01	0.000
Educational attainment	Less than HS (reference)	–	–	–	–	–	–
	High school	0.36	0.00	0.000	0.36	0.00	0.000
	Some college	0.55	0.01	0.000	0.55	0.01	0.000
	Bachelor's or more	1.04	0.01	0.000	1.04	0.01	0.000
Metropolitan status	Not (reference)	–	–	–	–	–	–
	In center city	0.04	0.01	0.000	0.04	0.01	0.000
Constant		1.23	0.01	0.000	1.23	0.01	0.000

s.e. = standard error

Table 5
Predicted hourly wages of commuters, holding individual characteristics constant, 2016 American Community Survey[a]

Disability status	Travel time	
	<35 minutes	35 minutes+
No disability	$16.09	$19.07
Any disability	$12.28	$14.56
Ambulatory only	$12.28	$14.56
Cognitive only	$11.23	$13.31
Hearing only	$13.18	$15.62
Independent living only	$11.80	$13.99
Self-care only	$11.69	$13.85
Vision only	$13.18	$15.62
More than one limitation	$15.00	$17.79

[a]Estimates based on an average worker with a disability (White male, age 49, with only high school education, not living in a center city).

4. Discussion

4.1. Mode of transportation to work

Our descriptive analysis highlighted some important points. First, private vehicles are by far the most important mode of transportation to work in the U.S., for both workers with and without disabilities. In future years, advances to self-driving vehicle technology may increase the ability of persons with disabilities to utilize private vehicles for all purposes (Claypool, Bin-Nun, & Gerlach, 2017). Policymakers should ensure that such advances are inclusive of the heterogeneous population with disabilities, while also acknowledging that assistance might be needed across the entire travel chain, from door to door.

Second, public transportation is only used by a small portion of the population to get to work. A combination of reduced access to public transportation as well as concerns about increases in travel time and loss of flexibility may contribute to this low level of use. In addition, for workers with disabilities, issues of accessibility may come into play. Although federal legislation requires that public transit be accessible, issues remain. Disability advocacy groups in New York City, for example, recently filed a class action suit against the Metropolitan Transportation Authority alleging discrimination against persons with ambulatory disabilities (Disability Rights Advocates, 2017).

4.2. Commute time

As we began our research, we questioned whether workers with disabilities would have shorter commute times than others. We found, however, that workers with disabilities were not significantly more likely than those with no disability to have shorter commute times, even when controlling for mode of transportation, and sociodemographic characteristics. These results held even when examining specific types of activity, functional or sensory limitations. This can be construed as a positive result, suggesting that commuters with disabilities are behaving similarly to commuters without disabilities.

As our data did not include information about the actual miles traveled to work, we are limited in our ability to state with confidence that commute time is reflective of the geographic radius within which persons with disabilities are obtaining work, however. Persons with disabilities could be working closer to home while simultaneously facing longer commute times, possibly reflecting restricted choices in terms of employment. Other surveys which include more detail about travel to work, such as the National Household Travel Survey, are improving their identification of persons with disabilities and may provide a reliable source for further research in this area.

4.3. Wages and commute time

Our results also confirmed prior research, which had suggested that females had shorter commute times than men (Haley-Lock, Berman, & Timberlake, 2013). Females were also earning approximately 26 percent less per hour than men, holding all else constant. These findings highlight that women with disabilities may be at particular disadvantage in terms of employment, compared to men. Prior research has suggested that such joint disadvantage exists for women with disabilities (O'Hara, 2004). Adjusting the data in Table 5 to represent a female worker with a disability and similar characteristics as those described above results in a female worker with a disability earning $9.48 per hour. A male worker with a disability would earn 30 percent more per hour ($12.28). The need for additional gender-specific research and policymaking in this area is clear.

At the outset of our research, we also questioned whether workers who traveled similar lengths of time earned similar hourly wages, controlling for disability status and other factors. Our findings point to substantial monetary differences in wages between workers with and without disabilities. These results are striking considering that we controlled for individual characteristics (including educational attainment) as well as commute time. While workers with disabilities were as likely to have long commute times as

other workers, the returns in terms of wages were lower. Indeed, workers with disabilities who commuted 35 minutes or longer earned less ($14.56 per hour) than workers without disabilities who had shorter travel times to work ($16.09 per hour). Wage differences were evident by limitation type as well. Persons with cognitive limitations earned the lowest amounts per hour.

Prior research among the general population (Blumenberg & Fields, 2013; Madden & Chiu, 1990; Rapino & Fields, 2013) has suggested that those who have longer commutes earn higher wages. Within limitation type, those who traveled longer to work did earn more per hour, yet did not match the higher wages of workers without disabilities. Other factors such as discrimination, health issues, or occupation choices may be negatively influencing the earnings of workers with disabilities. Future work which considers the relevance of these factors along with commuting characteristics can provide information that can be used by policymakers to ensure that persons with disabilities are earning to their full potential.

4.4. Limitations

In-depth qualitative research could build off of the findings presented here to better understand the nuances of commuting with a disability, while also addressing some of the limitations inherent in using cross-sectional Census data which relies on self-report data. Greater detail on job location relative to home, as well as disability types, associated health conditions, and personal decisions about employment options would provide more detail in important areas. In addition, it is important to note that this analysis focused on workers with disabilities and thus the results in terms of modes of transportation should not be assumed to apply to persons with disabilities who are not employed. Workers with disabilities are likely to have less severe limitations than other persons with disabilities, which may also influence residential choice and access to private transportation. The work presented here does not provide any detail about transportation barriers, which may be precluding other individuals with disabilities from joining the work force.

5. Implications for vocational rehabilitation

This study adds to our knowledge of the association between commuting time and wages for workers with disabilities, emphasizing that workers with disabilities face commutes similar in time as those faced by workers without disabilities. Vocational rehabilitation providers should therefore consider extending the geographic range of possible employment opportunities for their clientele and, in turn, approving transportation costs that will allow for more geographic mobility. This may entail moving beyond a reliance on public transportation options and moving towards stronger vocational rehabilitation support for self-directed modes of transportation. Braiding together funding from not only vocational rehabilitation services but also from other agencies such as the U.S. Department of Transportation may increase the viability of this option. Overall, however, our finding that persons who had longer commute times did have higher earnings is offset by concerns that workers with disabilities, holding all else constant, continue to earn less than workers without disabilities.

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Conflict of interest

None to report.

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