

PVTA Fare Hikes and Service Cuts Affect Health and Equity

Pioneer Valley Transit Authority (PVTA) is the largest public transit system in Western Massachusetts, serving 24 cities and towns with a total population of 580,000. PVTA is facing a projected \$3.1 million budget deficit for FY2019 which starts on July 1, 2018. This deficit is due to an increase in fuel costs, wages, and insurance as well as inflation. Proposed changes include raising fares by approximately 25%, eliminating or reducing service on poor-performing routes, and charging a premium fare for paratransit trips completed outside the required ¼ mile route buffer.¹

As part of a graduate course in Health Impact Assessment (HIA) at the University of Massachusetts, Amherst, School of Public Health and Health Sciences, the students conducted an HIA to assess how proposed service changes and fare hikes might impact the health of PVTA riders. An HIA systematically judges the potential effects of a policy, plan, program, or project on the health of a population and the distribution of those effects. The students' HIA examined the impacts on **social isolation, access to jobs, and access to medical care**. The following are their HIA findings.

PVTA fare hikes and service cuts would disproportionately impact low income individuals and people of color

- Roughly half of PVTA riders live below the Federal Poverty Level of \$11,770 (2016).
- Fare hikes will lead to annual transportation cost increases of over \$120 for nearly half of fixed route fare riders.
- An estimated 16% of paratransit riders (approximately 640 – those who live ¼ mile or more from a bus route) will experience a \$184 per year increase in costs.
- In Springfield, 22% of households do not own a vehicle, with some neighborhoods having rates as high as 59%; these neighborhoods are also among the lowest income in Springfield.²
- People of color experience up to 20% higher rates of transportation disadvantage.³

PVTA fare hikes and service cuts will increase social isolation

- Social isolation is associated with poor mental health, increased susceptibility to dementia and cognitive decline, poor cardiovascular health, and higher levels of premature mortality.⁴
- The magnitude of risk associated with social isolation is comparable to that of cigarette smoking.⁵
- Having adequate transportation systems in a community can help prevent social isolation.⁶
- Populations at particular risk of social isolation include the elderly, disabled, low-income individuals, and people who are transit-dependent.
- Seniors who do not drive make 65% fewer trips to visit friends and family than seniors who drive.⁷
- 28% of people with disabilities never leave home because of transportation difficulties.⁸
- Elimination of service on routes experiencing service cuts is estimated to disrupt nearly 8,000 trips for social/recreation or shopping, which could increase social isolation among PVTA riders and would likely disproportionately impact riders over age 65.

PVTA fare hikes and service cuts will decrease access to jobs

For almost every health indicator, outcomes improve with stable employment and incomes.

- Populations at particular risk of being unable to access jobs due to public transportation difficulties include people with lower incomes, people of color, and those who are unemployed.⁹
- Populations with better public transportation networks that allow them to access places of employment have lower rates of unemployment.¹⁰

- Low income populations' choice of where to live has been found to be influenced by proximity to bus lines. People choose places of employment relative to their commuting mobility.¹¹
- Some people can potentially be forced to take low-paying jobs closer to their homes because of lack of access to affordable transit.¹²
- The inability of household members to get to places of employment on a regular basis is a driver of unemployment.¹³
- An estimated 3,000 people who use the PVTA to get to work and do not have another means of transportation would be affected by service cuts, risking their employment.

PVTA fare hikes and service changes will decrease access to medical care

For those who rely on public transportation, lack of bus access can lead to poor chronic disease management, fewer follow-up care appointments, poor prescription adherence, and worse health.

- Public transit is a vital link to medical care for people without a car or who do not drive.^{14,15,16}
- Populations at increased risk are the elderly, people with low-incomes, people of color, and those with language barriers.
- An estimated 1,300 PVTA riders who use the bus for medical trips and do not have another means of transportation would be impacted by decreased service.

This health impact assessment concludes that the service cuts and fare hikes would have a negative impact on social isolation, access to medical care, and access to jobs – all of which are vital for health. The cuts would inequitably impact those with low-incomes, communities of color, the elderly, disabled, and people who are transit dependent. **The main recommendation of this health impact assessment is to fund the RTAs statewide at \$88 million, which has been included in the MA senate budget as of this writing in May of 2018.**

UMassAmherst
 School of Public Health
 & Health Sciences

Acknowledgements

HIA Class: Alana Barrett, Hannah Dalglish, Kristine Desotto, Fareeha Irfan, Taylor McAndrew, Mikaela Momot, Rejoice Sarpoong
 Instructors: Kathleen Szegda, Kim Gilhuly
 Advisors: Price Armstrong (PVTA), David Elvin (PVPC)

With support from:



**PUBLIC HEALTH INSTITUTE
 OF WESTERN MASSACHUSETTS**
 PARTNERS FOR HEALTH EQUITY

References

- ¹Pioneer Valley Transit Authority and Pioneer Valley Planning Commission documents sourced: 2015 PVTA Onboard Customer Survey Southern Service Region; 2016 PVTA Onboard Customer Survey Northern Service Region; 2018 PVPC Service Equity Analysis for FY2019 Service Change Proposals; 2017 ADA Paratransit Survey Results. ²Wallace, R. H.-C. (2014). Access to Health Care and Nonemergency Medical Transportation Two Missing Links. *Transportation Research Record*, 1924, 76-84. ³Live Well Springfield. Online Maps: Transportation Analysis. <http://pvpc.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=72e06c61d02b4ad386157f24168c8542>. Accessed 5/30/18.
- ⁴Franck, L., Molyneux, N., & Parkinson, L. (2016). Systematic review of interventions addressing social isolation and depression in aged care clients. *Quality of Life Research*, 25(6), 1395-1407. ⁵House James S. Social Isolation Kills, But How and Why? *Psychosomatic Medicine*. 2001;63:273-74. ⁶Poscia, A., Stojanovic, J., La Milia, D. I., Duplaga, M., Grysztar, M., Moscato, U. & Magnavita, N. (2018). Interventions targeting loneliness and social isolation among the older people: An update systematic review. *Experimental gerontology*, 102, 133-144. ⁷Bailey, Linda (2004) —Aging Americans: Stranded without Options Surface Transportation Policy Project, Washington, D.C. ⁸Durant S. 2003. Transportation difficulties keep over half a million disabled at home. Bureau of Transportation Statistics. US Department of Transportation. ⁹Geneidy et al. (2015). The cost of equity: Assessing transit accessibility & social disparity using total travel cost. *Transportation Research*, 91 (A). ¹⁰Tyndall, J. (2017). Waiting for the R train: Public transportation and employment. *Urban Studies* 54(2). ¹¹Boschmann, E. (2010). Job access, location decision, and the working poor: A qualitative study in the Columbus, Ohio metropolitan area. *Geoforum* 42. ¹²D., Ercolani, M., & Mackie, P. (2017). Econometric analysis of the link between public transport accessibility and employment. *Transport Policy*, 60, 1-9. ¹³Tyndall, J. (2017). Waiting for the R train: Public transportation and employment. *Urban Studies* 54(2). ¹⁴Institute of Medicine. (1993). *Access to Health Care in America*. Washington, D. C.: National Academies of Science Press. ¹⁵Health Outreach Partners. (2014). *Outreach across populations: 2013 national needs assessment of health outreach programs*. Oakland, California: Health Outreach Partners. ¹⁶Partners for a Healthier Community, Collaborative for Educational Services, & Pioneer Valley Planning Commission. (2016). *Community health needs assessment: Regional executive summary*.