



Equity Analysis for Municipally Operated Senior Van Service in the Towns of Longmeadow, East Longmeadow, and Hampden



Prepared by the
Pioneer Valley Planning
Commission for the
Pioneer Valley Transit
Authority

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Summary

The Pioneer Valley Transit Authority (PVTA) will begin a pilot program in partnership with the Towns of Longmeadow, East Longmeadow, and Hampden in which the Councils on Aging (“senior centers”) of these communities will operate the Senior Service van transportation, sometimes known as “Dial-a-Ride,” that is currently offered by PVTA to residents of those communities who are age 60 and older. This is a pilot program that will begin in May 2017 with an initial agreement period to be determined.

PVTA’s Senior Service van transportation is a discretionary service provided at the direction of the PVTA Advisory Board. Senior van service differs from the PVTA’s ADA (Americans with Disabilities Act) van service, which by federal law must operate in a manner that is “complementary” to PVTA’s fixed route scheduled bus routes in the same geographic areas, during the same hours, and with comparable performance standards. PVTA Senior Service van transportation, on the other hand, is operated according to performance standards, fares, and budget established locally by the PVTA Advisory Board.

There will be no change to PVTA’s ADA van service for residents of these communities or any other persons who are eligible for, and who use, the ADA vans.

The Senior Service pilot program will affect only van riders who are residents of the Towns of Longmeadow, East Longmeadow, and Hampden age 60 and older. There will be no changes to Senior Service van transportation in other PVTA communities.

The fare for the Senior Service van transportation provided by Towns of Longmeadow, East Longmeadow, and Hampden will be \$1.00 per ride for trips that begin and end within each of the those respective communities and \$2.00 per ride for trips to and from destinations outside the town in which the trip originates. Currently, the Senior Service fare on PVTA vans is \$2.50 per ride for any trip that begins within these three communities to destinations within that community or to neighboring communities that would not require a transfer if the trip were made on a fixed route bus. For trips that are further away (beyond immediately neighboring towns) and would require two or more transfers to complete using the fixed route bus system, the fare is \$3.00 and \$3.50. However, the municipally operated Senior Service may not travel to all communities or on all days of the week that currently can be accessed via the current PVTA Senior Service.

The service hours of Senior Service van transportation operated by the three towns will be Monday through Friday from 8:30AM (first pick-up) to 3:00PM (last drop-off), for a total of 32.5 hours per week. This is a 24% reduction in the number of service hours for Senior Service as it is currently provided by PVTA Monday through Friday from 8:00AM to 4:30PM for a total 42.5 hours per week. **The 20% to 60% fare reduction significantly offsets this impact and will help make Senior Service van transportation more accessible and affordable to low-income seniors of these towns.**

Therefore, PVTA’s proposed partnership with the Towns of Longmeadow, East Longmeadow and Hampden to provide support for municipally operated Senior Service van transportation for their residents age 60 and older is equitable with the mitigation proposed in this analysis.

1. Conformance with Regulatory Requirements

This analysis has been prepared to comply with the requirements of Title VI of the Civil Rights Act of 1964 in 49 CFR Section 21.5(b)(2), 49 CFR Section 21.5(b)(7), and Appendix C Section 3 to 49 CFR part 21, and in accordance with the guidance in Federal Transit Administration (FTA) Circular 4702.1B of October 1, 2012 and related guidance to FTA recipients with service areas containing 200,000 or more residents. Under these regulations and guidelines, the Pioneer Valley Transit Authority (PVTA) is required to conduct a Title VI equity analysis in the course of planning a major service change or any magnitude of change to fare prices or fare media (method of payment) to determine whether service or fare changes will have a discriminatory impact with regard to race, color, income, or national origin.

Equity analyses such as this are required regardless of whether proposed changes would be beneficial or detrimental to riders.

This equity analysis has been prepared because it is likely that more than 25% of the 128 residents of the Towns of Longmeadow, East Longmeadow, or Hampden who currently use PVTA's Senior Service van transportation program would be affected by the new reduced fares (\$1.00 or \$2.00 per trip, reduced from \$2.50, \$3.00, or \$3.50 per trip, depending on fixed route transfer requirements; see Appendix 1) and service policies (reservations and van service to and from destinations within the three towns to be provided by the Council on Aging). This 25% threshold is established by the PVTA Advisory Board in its policy for assessing disparate and disproportionate fare and service impacts (Sections 7.1 and 7.2).

The purpose of an equity analysis is to determine whether or not the new fares and service policies would have an adverse impact on PVTA customers of color and/or low-income riders. A demographic analysis of the customers who using PVTA's current Senior Service van transportation program in these three communities is required by FTA so that PVTA can determine whether there are adverse or disproportionate burdens on minority or low-income populations and what are the effective and appropriate measures to mitigate those impacts on those customers.

(In accordance with FTA guidance, this report uses the term "minorities" where necessary to conform to federal regulations that refer collectively to people who are not white. However, in PVTA's view the term "minorities" is not consistent with the intent and purpose of an equity analysis. Therefore, PVTA uses more inclusive language with respect to race and ethnicity where ever possible in this document.)

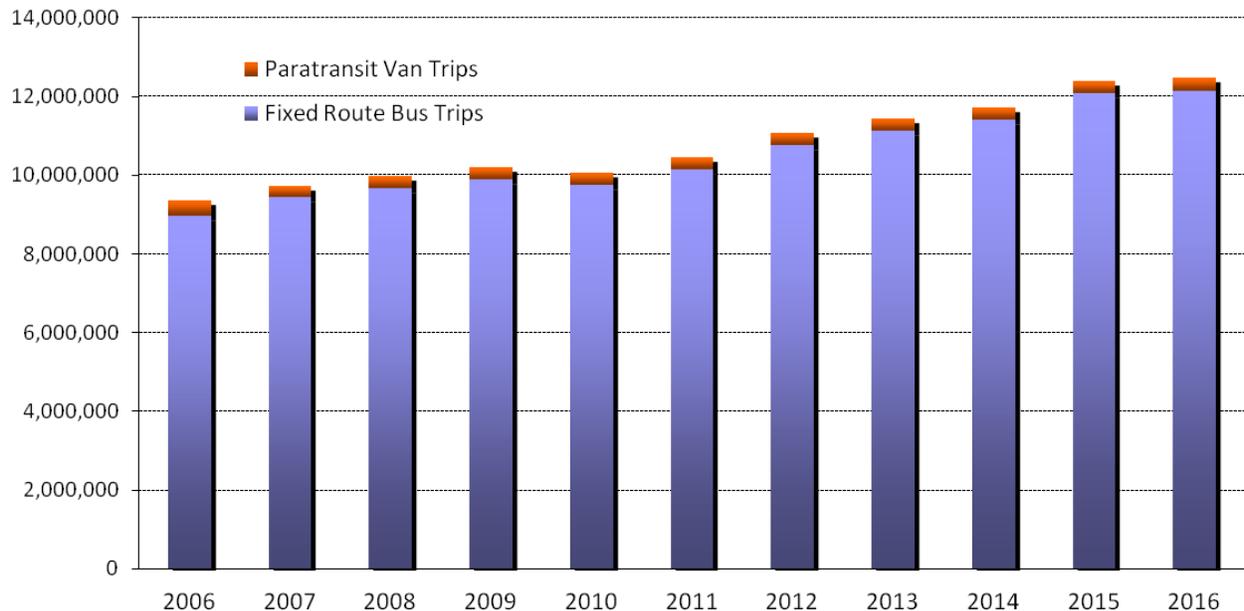
2. PVTA Background Information

The Pioneer Valley Transit Authority (PVTA) serves 24 communities in Western Massachusetts with a population of 580,230 (ACS 2014 five-year estimates). PVTA is a designated recipient of Federal Transit Authority (FTA) funds that provides fixed route bus to a geographic area measuring some 625 square miles that contains the Cities of Springfield, Chicopee, and Holyoke; the Five Colleges area of Northampton and Amherst, including more than 30,000 students and employees at the University of Massachusetts Amherst; and outlying suburban and rural communities.

PVTA also operates two paratransit demand response van transportation services: the complementary paratransit services for persons with doctor-verified disabilities as required by the Americans with Disabilities Act (ADA), which operates in the same geographic areas and hours as PVTA's fixed routes; and the Senior Service van transportation program, which is available to any resident of PVTA's service area age 60 and older Monday through Friday from 8:00 AM to 4:30 PM (except holidays) at the same fares as ADA service.

PVTA's fleet includes 186 heavy duty transit buses, 144 paratransit vans, and five 18-passenger vans. PVTA provided 12.5 million passenger trips in FY2016 (July 1 to June 30), up 27% since FY2006.

Fig. 2-1: PVTA Ridership FY2006 to FY2016

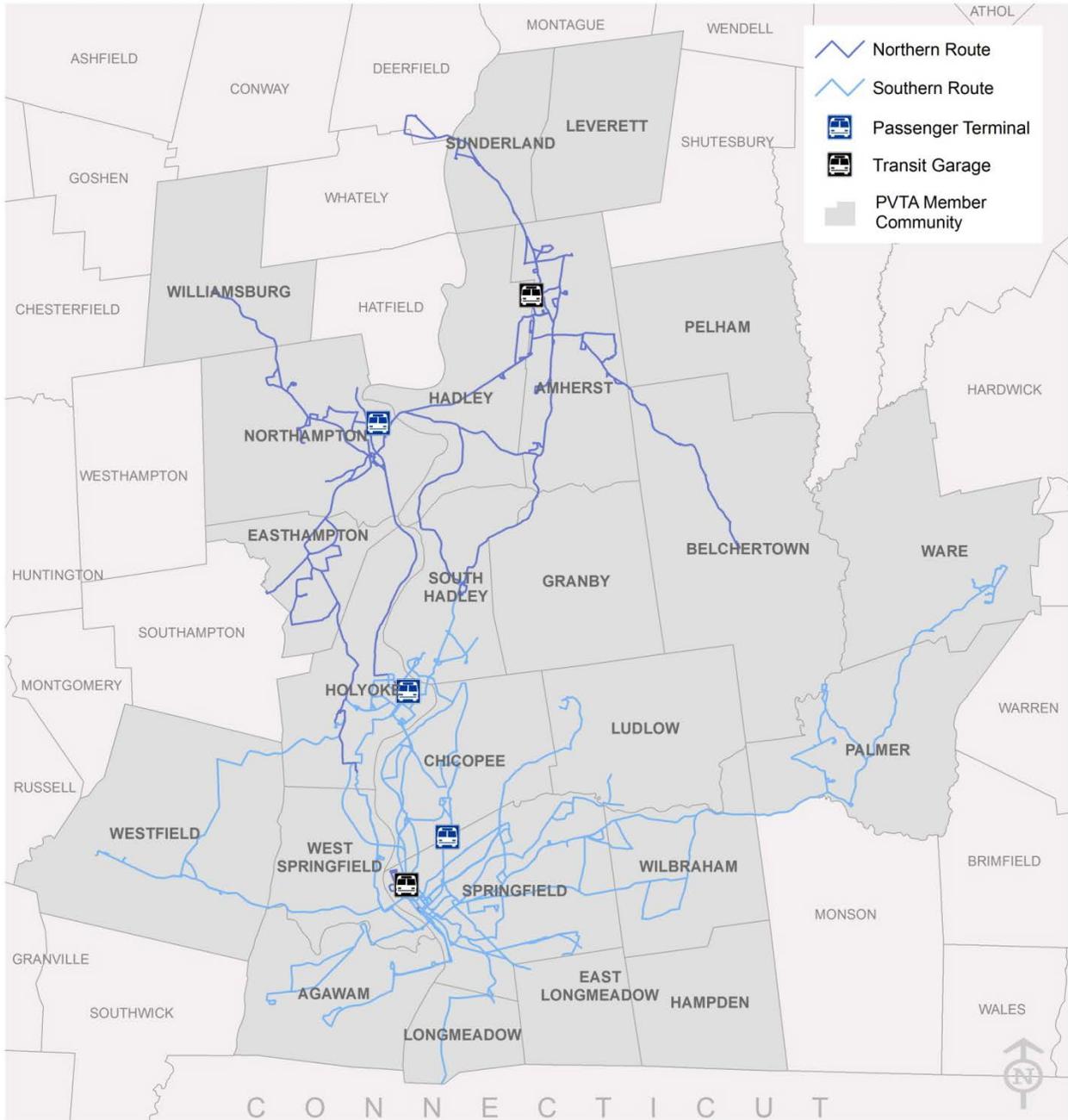


Rides provided by PVTA's ADA and Senior Service van transportation programs comprised 2.7% of all trips in FY2016. Senior Service rides were approximately 60% of all van rides, and 1.6% of all PVTA rides.

Created in 1974, PVTA had an operating budget of \$45 million in FY2015. Under Massachusetts law, PVTA and the Commonwealth's 13 other regional transit authorities may not directly operate transit services. Therefore, PVTA competitively contracts with private companies to operate its fixed routes bus routes and paratransit van services. Currently, these contract operators are UMass Transit Services, First Transit, and Hulmes Transportation Services.

Funding for PVRTA operations and capital improvements comes from several sources: federal grant programs; state and local governments; institutions; advertising; and passenger fares, which accounted for 18% of the total cost of services in FY2015.

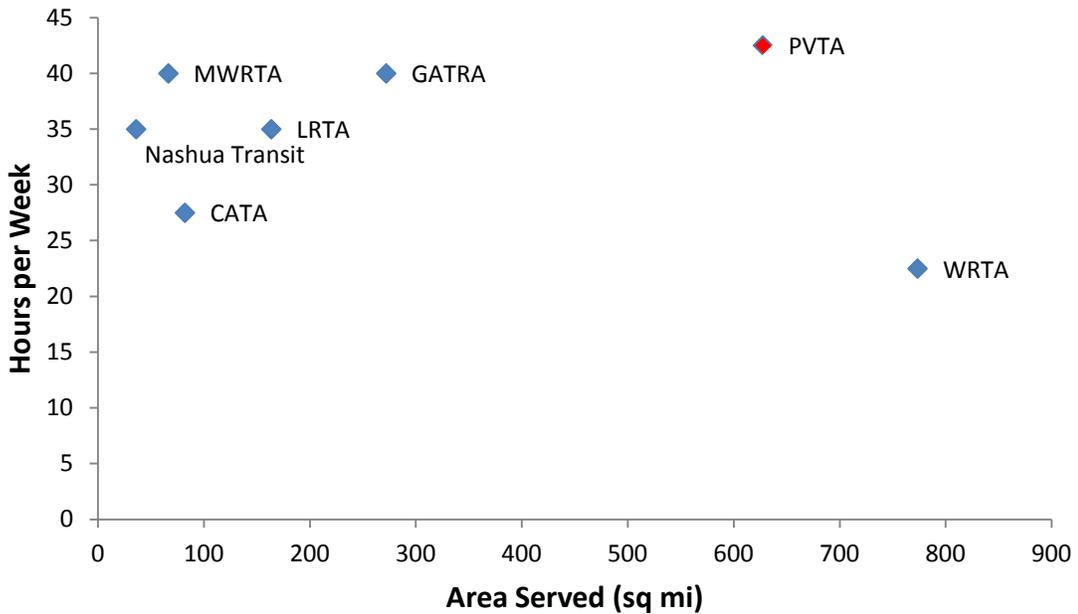
Fig. 2-2: PVRTA Service Area



PVTA’s Senior Service van transportation is unique in Massachusetts. In the Commonwealth, this type of van service, sometimes known as “Dial-a-Ride,” is primarily offered by regional transit authorities that serve rural communities without fixed route bus service.

Dial-a-Ride service for seniors tends to be much more limited in Massachusetts, as compared to the ADA (Americans with Disabilities Act) service for people with certified disabilities that is required by federal law, either in the hours of operation, or service area, or both, as the analysis below shows. Further, the senior van service by other RTAs tends to complement, rather than duplicate, van service for seniors that is operated by the local council on aging. In most cases, van service for seniors in other areas focuses on in-town trips, with scheduled times for long-haul trips for medical appointments or other trip purposes.

Fig. 2-3: Comparison of RTA Senior Van Services Hours of Operation and Geographic Service Area



The analysis above shows that PVTA’s Senior Service van transportation is unique in Massachusetts because it offers the greatest number of service hours per week (42.5 hrs) and the largest geographic service area (625 square miles).

3. PVTA Ridership Profile

The majority of PVTA customers (97.3%) are bus riders. PVTA estimates there are approximately 15,000 to 18,000 people who are regular bus riders, and many more who are occasional riders.

There are also approximately 3,000 van riders. About 1,400 of these riders use the ADA van service, and 1,600 use Senior Service van transportation. There were 1,615 active Senior Service customers from August 1, 2016 through January 31, 2017, the period from which the ridership data presented in Section 1 is drawn

Significantly, while Senior Service van trips constitute approximately 1.6% of all PVTA rides, the number of Senior Service customers accounts for nearly 8% of all persons who ride PVTA (bus and van services combined). This is due to the fact that Senior Service customers tend to make trips less frequently—once a week or less—than bus riders, the majority of who ride at least three or more times a week (based on ridership frequencies reported in PVTA bus rider surveys).

All PVTA customers are more dependent on transit services than the regional average. A total 68% of PVTA bus riders surveyed said they have “No other way to make my trip.” (PVTA 2015-2016 onboard rider surveys, n=2,798). And PVTA’s van riders are similarly dependent on public transportation: the 2011 van rider survey found that more than one-third of van users have no other way to make their trip

3.1 Senior Van Service Customer Demographics

PVTA may not collect demographic information about its ADA van transportation customers as part of the reservations and fare payment processes, consistent with federal laws. This policy has also been applied to Senior Service customers, as well. Therefore, the information about van riders presented in this section was compiled from two mailed surveys of van riders in 2011 and 2013. Additional information is presented from 2010-2014 American Community Survey five-year estimates.

Following is a summary of existing PVTA Senior Service usage in the three communities during the most recent fiscal year 2016 (July 1, 2015 through June 30, 2016):

Town	Users	% of All System Senior Service Users (1,615 persons)	Senior Service Trips	% of All Systemwide Senior Service Trips (27,947 trips)	% Trips Within Municipality	% Trips Outside Municipality
Longmeadow	36	2.2%	420	1.6%	19.5%	80.5%
E. Longmeadow	67	4.1%	1,152	4.3%	33.1%	66.9%
Hampden	25	1.5%	200	1.0%	1.0%	99.0%
Combined	128	7.8%	1,772	6.9%		
Average					26.2%	73.8%

PVTA registered ADA user records and ridership 8/1/16 through 1/31/17

The table above shows that during the six-month period August 1, 2016 through January 31, 2017, PVTA provided a total 27,947 Senior Service van trips (pick-ups and drop-offs for a round trip are counted as two separate trips) in its 24 member communities. The share of these trips that was made by senior residents of Longmeadow, East Longmeadow, and Hampden was 1,772 trips, which was 6.9% of the systemwide total. Of these 1,772 trips by residents of the three towns, there were 465 trips (26.2%) that began and ended within the traveler’s home town. The remaining 1,307 trips (73.8%) were to and from destinations outside the traveler’s home town.

3.1.1 Age

PVTA Senior Service van transportation is available only to residents of PVTA member communities (see Fig 2-2) who are age 60 and older. PVTA is currently the provider of this service its 24 member communities. As of March 13, 2017, the City of Northampton will become the provider of Senior Service van transportation for its residents age 60 and older under an agreement with PVTA that is similar to the proposal described in this document.

The graphs below shows the age breakdown (in 5-year categories) of the 1,615 PVTA Senior Service riders from August 1, 2016 to January 31, 2017 and compares them to the age of the 128 Senior Service riders in these three communities during that period. The analysis shows that in general, there are more Senior Service customers in these three communities who are older than 75 than average. Therefore, a change in service would affect a greater proportion of elderly Senior Service customers.

Fig 3.1.1-1: Age of PVTA Senior Service Riders: System Total vs. Proposed Service Area (FY2016)

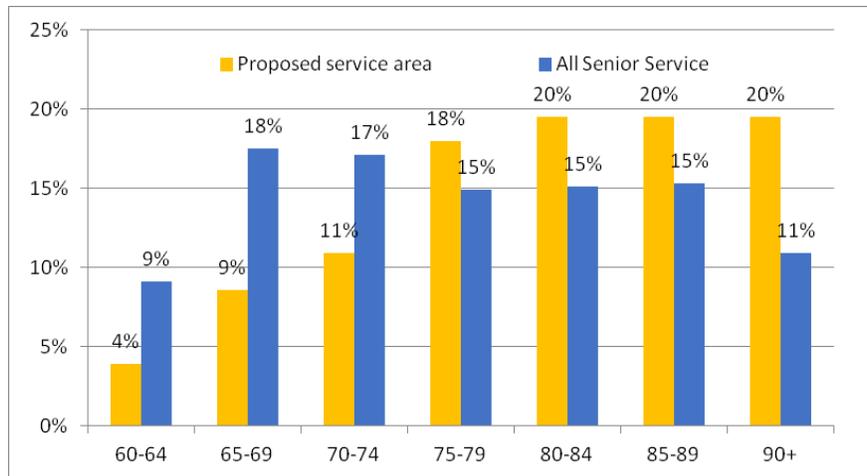
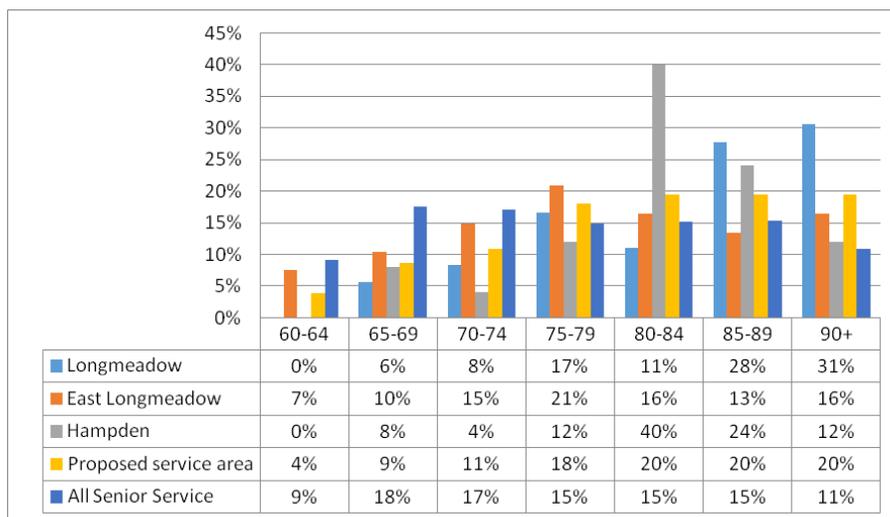


Fig 3.1.1-2: Age of PVTA Senior Service Riders: System Total vs. Individual Towns (FY2016)

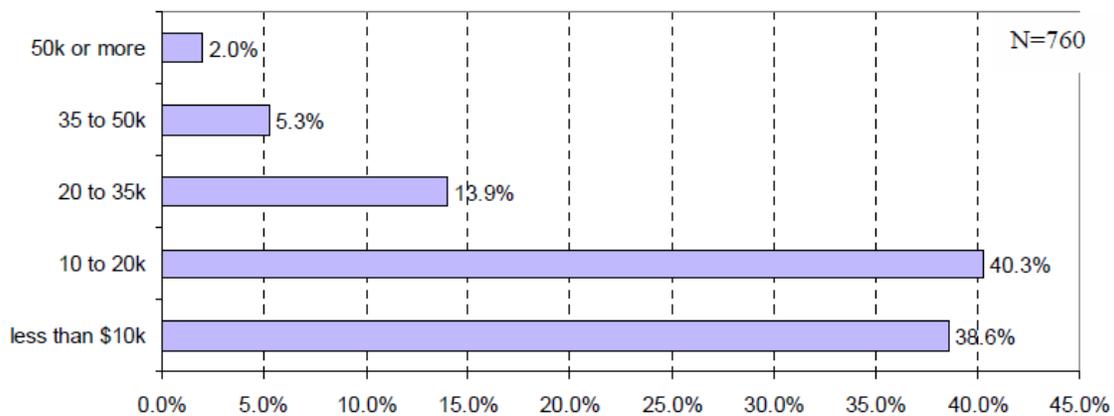


Source: PVTA Customer service records 8/1/16 through 1/31/2017

3.1.2 Income

PVTA ADA and Senior Service van riders on average have personal incomes that are significantly less than the regional average. (PVTA does not collect or require Senior Service customers to provide income information to use the service.) In 2011, when the federal poverty threshold was \$10,890 for single person households, approximately 40% of all PVTA van riders (ADA and Senior Service) had incomes below the poverty line (see below). Therefore roughly 2 in every 5 of all van riders are living in poverty, and approximately 4 of every 5 riders have incomes less than \$20,000 per year (the approximate poverty threshold for a typical three-person household). Another 13.9% had incomes between \$20,000 and \$35,000, and 5.3% had incomes between \$35,000 and \$50,000. Only 2% of van riders had an income greater than \$50,000 a year.

Fig 3.1.2-1: PVTA Van Riders “What is Your Typical Income?” 2011 Survey Results



Source: PVTA Paratransit Customer Survey 2011

While demographic information about PVTA van riders has not been surveyed since 2011, it is likely that van riders today have personal income characteristics similar to those of five years ago. American Community Survey 2014 five-year estimates show that 55% of commuters in the PVPC region who take transit to work make less than \$10,000/year. Another 29% make between \$10,000-\$14,999/year, of which approximately 6% can reasonably be estimated to be below the \$11,770 federal poverty threshold shown below. Therefore, the estimated proportion of transit commuters in the region below the poverty level is likely to be at least 61%; therefore, the survey finding of approximately 78% seen above is reasonable. The current federal poverty threshold is shown below.

Fig 3.1.1-1: Federal Poverty Thresholds 2016

Household Size	Annual Income
1 person	\$11,770
2 people	\$15,930
3 people	\$20,090
4 people	\$24,250
5 people	\$28,410
6 people	\$32,730

Source: U.S. Department of Health and Human Services

3.1.2 Race and Ethnicity

In the PVTA service area, transit customers are more racially and ethnically diverse than the regional average. In fact, the proportion of transit commuters in the PVTA service region who are people of color is approximately four times greater than the proportion of non-white persons in the region as a whole.

Fig 3.1.2-2: Regional Commuting by Public Transportation by Race

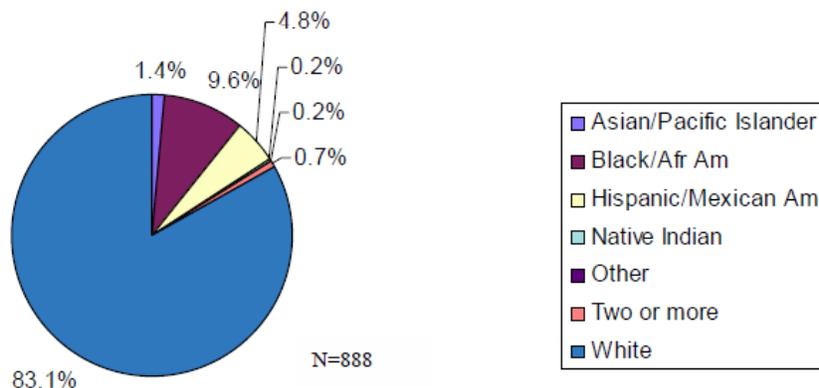
Race	<i>Proportion of Commuters Who Take Public Transportation to Work</i>			
	Hampden County	Hampshire County	Longmeadow, East Longmeadow, Hampden	PVTA Riders Who Use Bus to Commute to Work (25% of riders surveyed)
American Indian/Alaska Native	0.4%	0.0%	<i>Below margin of error</i>	0.6%
Asian	1.4%	24.4%	<i>Below margin of error</i>	3.1%
Black/African American	27.5%	3.1%	<i>Below margin of error</i>	19.8%
Hawaiian/Pacific Islander	0.0%	0.0%	<i>Below margin of error</i>	0.0%
Hispanic/Latino	41.8%	9.5%	<i>Below margin of error</i>	33.8%
White	45.5%	70.1%	<i>Below margin of error</i>	29.8%
Another Race	20.2%	0.6%	<i>Below margin of error</i>	3.3
Two+ races	5.1%	1.7%	<i>Below margin of error</i>	9.7%

Source: American Community Survey 2014 five-year estimates; PVTA Customer Surveys 2015 and 2016

However, the number of residents of Longmeadow, East Longmeadow and Hampden who commute to work using public transportation is too small to report racial breakdowns with statistical reliability. Therefore, customer surveys are the only source of information available with respect to van rider race and ethnicity.

The 2011 survey of PVTA ADA and Senior Service van riders (see chart below) found that 83% of riders were white and 16% were people of color. Of these people, 9.6% were black, 4.8% were Hispanic, 1.4% Asian, and 0.2% Native Indian. ACS 2010-2014 five-year estimates show the proportion of white residents in the three towns was % for all residents, and approximately 95% for residents age 60 and older (ACS 2010-2014 five-year estimates; results for age 54-65 age bracket estimated using mid-point method).

Fig 3.1.2-1: Racial Characteristics of PVTA ADA and Senior Service Customers from 2011 Survey



3.1.3 Language and English Proficiency

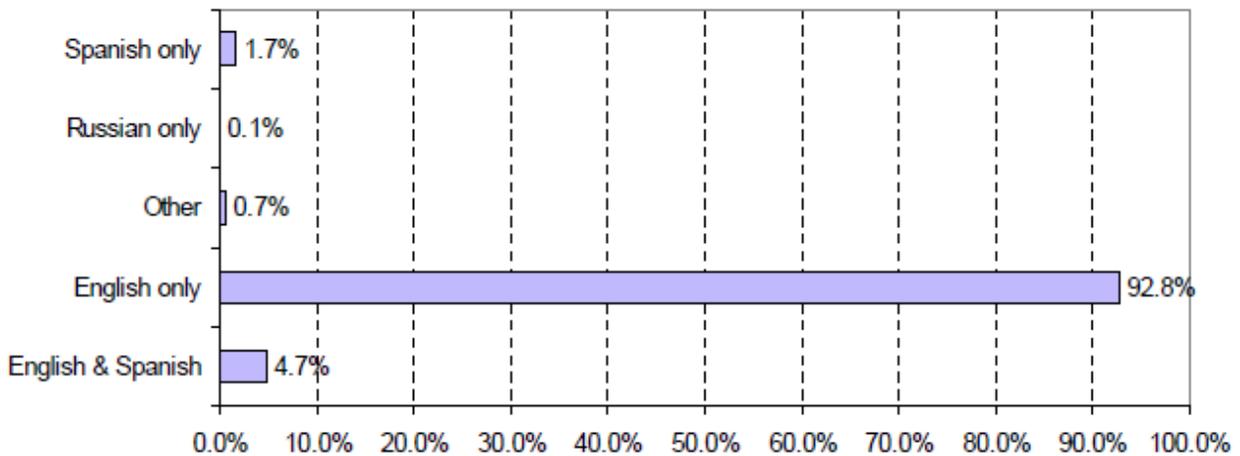
Of the 128 residents of the three participating towns who used PVTA’s Senior Service vans August 1, 2016 to January 31, 2017, there were 126 who speak English primarily, according to PVTA customer information records. The two customers who do not speak English primarily speak German and Chinese; however, neither have requested translation.

Fig 3.1.3-1: Primary Languages Spoken by PVTA Senior Service Customers FY2016

	English	Polish	German	Spanish	Vietnamese	Portuguese	Chinese	Subtotals
Systemwide	1,587	1	1	23	1	1	1	1,615
Longmeadow	35	0	0	0	0	0	1	36
E. Longmeadow	67	0	0	0	0	0	0	67
Hampden	24	0	1	0	0	0	0	25
Towns combined	126	0	1	0	0	0	1	128

The 2011 survey of ADA and Senior Service van riders found a small percentage (2.5%) of customers did not speak English at home, and the majority of those are Spanish speakers. Another 4.7% spoke both English and Spanish at home. The majority of customers, 92.8%, spoke only English at home.

Fig 3.1.3-2: Primary Languages Spoken by All PVTA Van Service Customers 2011



This information suggests that providing program information in English will initially be sufficient to meet the language needs of Senior Service customers in the three towns during the pilot period. In future phases, it will be important for the three communities to also provide program information in Spanish as part of regular materials and offer translation to other languages upon request.

5. Municipal Senior Service Van Transportation Pilot Program Description for Longmeadow, East Longmeadow, and Hampden

Under an intergovernmental agreement with the Towns of Longmeadow, East Longmeadow, and Hampden, the senior centers of these communities will work together to provide the Senior Service van transportation currently provided by PVTA for residents of these three towns who are age 60 and older. This is a pilot program to evaluate the feasibility of local municipal delivery of this service with PVTA support. The pilot will begin in the summer of 2017 for a period to be determined.

Fig 5-1: Summary of Existing and Proposed Senior Service in Longmeadow, East Longmeadow, and Hampden

Service Item	Existing PVTA Senior Service	Municipally Operated Senior Service
Days of Service	Monday through Friday (excluding holidays)	Monday through Friday (excluding holidays)
Hours of Service	42.5 hrs/wk: Mon-Fri 8:00AM to 4:30PM	32.5 hrs/wk: Mon-Fri 8:30AM to 3:00PM
Phone reservation line hours	42.5 hrs/wk: Mon-Fri 8:00AM to 4:30PM	37.5 hrs/wk: Mon-Fri 8:00AM to 4:15PM
Geographic service area	PVTA member communities (see Fig. 2-2)	Longmeadow, East Longmeadow, Hampden and adjacent municipalities. Service to additional communities to be determined based.
Fare: Trips within the municipality in which the trip originates	\$2.50 per trip (10% discount if purchased in pack of 20 or 10)	\$1.00 per trip
Fare: Trips originating within Longmeadow, East Longmeadow, or Hampden to destinations in one of the other towns or an adjacent municipality	\$3.00 per trip	\$2.00 per trip
Fare: Trips originating in one of the three participating communities that would require 2 or more transfers via fixed route (see Appendix 1)	\$3.50 per trip	\$2.00 per trip
Cash on board accepted?	Yes	Yes
Pre-purchased ride tickets?	Yes	Yes
Ride ticket sales locations	Longmeadow Senior Center East Longmeadow Senior Center Hampden Senior Center PVTA Customer Service PVTA Online, Tickets by Mail	Longmeadow Senior Center East Longmeadow Senior Center Hampden Senior Center
Forms of payment accepted	Cash, check, credit card (Customer Service only), PayPal (pvta.com only)	Cash

This pilot program will affect only Senior Service customers who are residents of the Towns of Longmeadow, East Longmeadow, and Hampden. **There will be no change to PVTA's Senior Service for residents of the three towns or any other persons who are eligible for and use the ADA van service.** The Longmeadow/East Longmeadow/Hampden Senior Service pilot program will affect only Senior Service customers who are residents of these three towns. There will be no changes to PVTA's Senior Service van transportation for residents in other PVTA communities.

6. Public Outreach and Consultation

Public outreach for the implementation of the Senior Service van transportation pilot program in Longmeadow, East Longmeadow, and Hampden included the following activities:

- **May 24, 2016:** Meeting of PVTA Paratransit Committee. Project status briefing, consultation and receipt of public comment. PVTA offices, 2080 Main Street, Springfield.
- **June 29, 2016:** Meeting of PVTA Paratransit Committee. Project status briefing, consultation and receipt of public comment. PVTA offices, 2080 Main Street, Springfield.
- **June 29, 2016:** Meeting of PVTA Advisory Board. Project status briefing, consultation and receipt of public comment. 2808 Main Street, Springfield.
- **September 21, 2016:** Meeting of PVTA Advisory Board. Project status briefing, consultation and receipt of public comment. 2808 Main Street, Springfield.
- **October 29, 2016:** Meeting of PVTA Advisory Board. Project status briefing, consultation and receipt of public comment.
- **March 29, 2016:** Meeting of PVTA Paratransit Committee. Project status briefing, review of public hearing comments, consultation and receipt of additional public comment. PVTA offices, 2080 Main Street, Springfield.
- **March 29, 2016:** Meeting of PVTA Advisory Board. Project status briefing, report of Paratransit Committee, summary of public hearing comments, consultation and receipt of public comment. 2808 Main Street, Springfield.

PVTA staff held the following public hearings and informational meetings about the Senior Service van transportation pilot program at these times:

- **Thursday, February 23, 2017:** East Longmeadow Council on Aging, 328 North Main St, East Longmeadow. Session 1 from 3:30 to 4:30pm; Session 2 from 6:00 to 7:00pm
- **Monday, February 27, 2017:** Longmeadow Adult Center, 231 Maple Road, Longmeadow. Session 1 from 3:30 to 4:30pm; Session 2 from 6:00 to 7:00pm.
- **Tuesday, February 28, 2017:** Hampden Senior Center, 104 Allen Street, Hampden. Session 1 from 3:30 to 4:30pm; Session 2 from 6:00 to 7:00pm

At the hearing, PVTA staff presented the Senior Van Service program features. Key themes of public comments received are:

- Theme 1
- Theme 2
- Theme 3

7. Impact Analysis and Mitigation Measures

FTA guidance requires PVTA to determine or estimate of the number and percentage of users who will be affected by each service or fare being changed. This section presents information related to potential impacts of the proposed Municipal Senior Van Service program that may be either disproportionate for low-income riders (Section 7.1) and/or disparate for PVTA customers of color (Section 7.2). The intent of this analysis, as required by FTA guidance, is to yield clearer understanding of actual and potential differences in existing and proposed fares and service. The following matrix summarizes key anticipated program impacts and recommended mitigation measures.

Fig 7-1: Senior Service Van Transportation Potential Impacts and Proposed Mitigation

Item	Potential Impact	Mitigation
Geographic Service Area	Senior Service trips may not be available to all PVTA member communities, depending on the operational service capacity of the service.	The fare for trips originating and terminating within Longmeadow, East Longmeadow, or Hampden will be reduced from \$2.50 per ride to \$1.00 per ride (60% reduction). The fare for trips originating in one of these towns to one of the other towns or an adjacent municipality will be reduced to \$2.00 per ride (20% to 60%, depending on destination). These fare reductions offset potentially reduced geographic coverage by making it more affordable for seniors of these communities to travel to local destinations.
Fares: For trips originating and ending in one community	Fares will be change from \$2.50 to \$1.00 per trip for trips made by residents of Longmeadow, East Longmeadow, and Hampden that originate and end within the town in which the rider resides. This will affect an estimated 26.2% of current riders in these towns.	This fare change represents a 60% fare reduction for in-town trips, which will not adversely impact low-income customers or customers of color. No mitigation is required.
Fares: For trips that cross town lines	Fares will change from \$2.50, \$3.00, and/or \$3.50 per trip (depending on number of transfers that would be required to make the same trip by fixed route bus – see Appendix 1) to \$2.00 per trip for trips by residents of three towns to/from destinations outside the town in which they live. This will affect 73.8% of existing riders	This fare change represents a 20% to 60% reduction for out-of-town trips, depending on destination. This will not adversely impact low-income customers or customers of color. No mitigation is required.
Ride Ticket Sales Locations	The number of places where residents of the three towns will be able to purchase ride tickets will be reduced from five to three.	Cash on board payment will be accepted.
Fare Media	Customers in these three towns may have unused PVTA ride tickets purchased before the three towns begin to operate the service.	The Senior Centers of these communities will give refunds to residents for unused PVTA ride tickets during the first three months of the pilot program and submit them to PVTA for reimbursement.
Service hours	Hours of operation will be reduced from 42.5 hours per week to 32.5 hours per week (24% reduction).	The 20% to 60% fare reduction is a significant benefit that will help make van transportation more accessible to more seniors in these communities who may be unable to afford it. Also, van service will be maintained during

		morning and midday hours to minimize impacts on trips for medical appointments and shopping, which are the frequently requested trip purposes. These measures will offset the service hour reduction.
Reservation line number	Residents will have to call a different phone number to reserve trips.	PVTA will assure that its Customer Service operators and van reservationists have information to redirect calls from seniors in the three towns who wish to reserve a ride. Informational flyers will be posted on vehicles. Cards with the new reservation line and hours will be given to customers.
Reservation line hours	The number of hours that the phone reservation line is available for Senior Service bookings will be reduced from 42.5 hours per week to 38.75 hours per week (8% reduction).	Cards with the new reservation line and hours will be given to existing customers who live in the three towns.
Information access	Customer information is available in English and Spanish language documents.	The towns will make Senior Service information available in Spanish later in the pilot program.

7.1 Disproportionate Impact Assessment (to Low-income Customers)

This section presents an assessment of the potential disproportionate impacts of the Senior Service van transportation pilot in Longmeadow, East Longmeadow and Hampden on customers who have low incomes.

The threshold for such an impact is established by the PVTA Advisory Board’s Disproportionate Impact Policy:

“If a PVTA planned transit fare rate, fare media or major service change results in low-income populations bearing a variance that is **20 percentage points greater** in comparison to non-low-income populations, the resulting effect will be considered a low-income disproportionate impact.” (September 23, 2015)

To assess potential disparate impacts as required by PVTA policy (see Section 7.2), income information about residents of Longmeadow, East Longmeadow, and Hampden, as well as income information that is known about PVTA van riders, was considered and is presented below.

The proposed service would reduce the number of service hours from 42.5 to 32.5 hours per week (24%), and vans would not necessarily be able to regularly provide service to destinations that involve unusually long distances or travel times. This analysis finds that this reduction in service hours and coverage area could be a potential disparate impact to low-income Senior Service customers in the Towns of Longmeadow, East Longmeadow, and Hampden, particularly to low income residents (those in households earning less than \$15,000 annually). However, the proportion of residents of the three towns who are considered low-income is significantly smaller (by about two-thirds) than the proportion of people in households earning less than \$15,000 annually in Hampden County area (see below).

	HAMPDEN COUNTY		LONGMEADOW		E. LONGMEADOW		HAMPDEN	
Total households	176,900	100.0%	5,675	100.0%	6,039	100.0%	1,917	100.0%
Less than \$10,000	14,375	8.1%	184	3.2%	179	3.0%	38	2.0%
\$10,000 to \$14,999	12,968	7.3%	136	2.4%	174	2.9%	65	3.4%
\$15,000 to \$24,999	21,017	11.9%	318	5.6%	604	10.0%	113	5.9%
\$25,000 to \$34,999	17,360	9.8%	253	4.5%	434	7.2%	94	4.9%
\$35,000 to \$49,999	22,009	12.4%	322	5.7%	455	7.5%	147	7.7%
\$50,000 to \$74,999	29,688	16.8%	699	12.3%	853	14.1%	395	20.6%
\$75,000 to \$99,999	21,099	11.9%	601	10.6%	902	14.9%	384	20.0%
\$100,000 to \$149,999	23,354	13.2%	1,262	22.2%	1,286	21.3%	253	13.2%
\$150,000 to \$199,999	8,733	4.9%	698	12.3%	724	12.0%	245	12.8%
\$200,000 or more	6,297	3.6%	1,202	21.2%	428	7.1%	183	9.5%
Med. household income	\$50,461		\$111,081		\$81,655		\$81,018	

INCOME IN THE PAST 12 MONTHS (IN 2015 INFLATION-ADJUSTED DOLLARS)
2011-2015 American Community Survey 5-Year Estimates

PVTA does not require Senior Service van riders to provide income information, so analysis of specific income-related impacts to Senior Service customers in the three towns is not possible. A survey conducted in 2011 of PVTA's ADA van riders and Senior Service riders found that more than 78% of all van riders earned less than \$20,000 per year. However, the home addresses of survey respondents was not tracked and therefore could not be correlated with the income responses. Therefore, the proportions of Senior Service riders from the three communities of Longmeadow, East Longmeadow and Hampden cannot be evaluated.

The proposed mitigation for this potential impact is the significant reduction in the fare for the pilot service. The one-ride fare will be reduced from \$2.50 per ride to \$1.00 per ride (60% less) for trips within the town in which the trip originates, which are 26.2% of all Senior Service trips originating in one of the three towns.

Further, the fare for trips outside the town in which the trip originates (73.8% of all trips from one the three towns) will be reduced from \$2.50/\$3.00/\$3.50 per ride (depending on distance and number of comparable PVTA bus transfers that would be required to complete the same trip as shown in Appendix 1) to \$2.00 per ride to and from any destination outside the town in which the trip originates, which is a 20-60% fare reduction.

Federal guidance requires PVTA to compare the differences for each particular fare media for low-income users versus all users to determine whether or not this 20% threshold is reached. FTA guidance requires this be accomplished with an assessment of the availability of fare media with respect to point of sale locations and hours. This analysis is presented below showing existing and pilot program sales locations and hours for PVTA Senior Service that are available to residents of the three towns.

Figure 7.1-1: Disproportionate Impact Analysis and Mitigation

Item	Potential Impact	Mitigation
On board fare payment	Cash on board will continue to be accepted. No change.	No mitigation necessary
Hours of ride ticket sales at Senior Centers in Longmeadow, East Longmeadow and Hampden	No change. Ride tickets will be available Mon-Fri, 8:15AM to 4:00PM (38.75 hrs per week) as they are currently	No mitigation necessary
Ride ticket sales at other locations, Tickets By Mail, and pvta.com	Ride tickets for Senior Service customers will not be sold by PVTA Customer Service offices, by mail, or on pvta.com .	<p>1) Cash onboard will be accepted.</p> <p>2) PVTA Customer Service will direct residents of the three towns to their local Councils on Aging for ride ticket sales.</p> <p>3) The lower fares (20% to 60% less) are cheaper than the 10% bulk purchase discount currently offered by PVTA Customer Service offices, so there will be no financial benefit to purchase ride tickets from those offices or by mail or pvta.com.</p>
Service Hours	<p>Service hours will decrease from 42.5 to 32.5 hours per week (24% less). This is a potential disparate impact to low-income Senior Service customers in the three towns because the proportion of the three town's Senior Service customers who are considered low-income (those in poverty or earning less than \$20,000/year) is significantly larger—approximately 78%, based on surveys of PVTA van riders in 2011) than the proportion of low-income residents age 60+ for the three towns (approximately 20%, according to U.S. Census 2015 five-year estimates).</p>	<p>The Senior Service one-ride fare will be reduced from \$2.50 per ride to \$1.00 per ride (60% less) for trips within the town where the trip originates, which are 26.2% of Senior Service trips.</p> <p>Further, the fare for trips outside the town in which the trip begins will be reduced from \$2.50/\$3.00/\$3.50 per ride (depending on number of bus transfers that would be required to complete the same trip via PVTA fixed route service – see App. 1) to \$2.00 per ride to and from destinations outside the town where the trip begins, which is a 20-60% fare reduction. These fare reductions will make the pilot service cheaper for more seniors, thereby offsetting the reduced service hours that are necessary to achieve the fare reduction.</p>

7.2 Disparate Impact Assessment (to Customers of Color)

This section assesses whether or not there will likely be differences for each particular fare media between users who are not white and overall users. This is known as a “disparate impact.” The threshold for this impact is established in the Disparate Impact Policy adopted by the PVTA Advisory Board:

“If a PVTA planned transit fare rate, fare media change, or major service change results in minority populations bearing a variance that is **20 percentage points greater** in comparison to non-minority populations, the resulting effect will be considered a minority disparate impact.

“In the course of performing a Title VI Equity Analysis, PVTA must analyze how the proposed action would impact minority as compared to non-minority populations. This analysis would also be performed for low income populations as compared to non-low income population. In the event the proposed action has a negative impact that affects the low income or minority populations more than the non-low income or non-minority populations with a disparity that exceeds the adopted 20% thresholds, PVTA must evaluate whether there is an alternative that has a more equitable impact. Otherwise, PVTA must take measures to mitigate the impact of the proposed action on the affected minority population or low income population and demonstrate that a legitimate business purpose cannot otherwise be accomplished and that the proposed change is the least discriminatory alternative.” (September 23, 2015)

Senior Service van transportation in Longmeadow, East Longmeadow, and Hampden will be equally available to all residents of these towns age 60 and older, regardless of race or ethnic background. Therefore, the pilot program will not disproportionately impact customers of color, as compared to white customers. Customer surveys show approximately 83% of PVTA van riders (both ADA and Senior Service age 60+) are white, which is significantly less than U.S. Census estimates for proportion of the residents of these towns who are white, as shown in the table below.

Town	Population	Population Age 60+		White		White age 60+	
Longmeadow	15,877	4,065	25.6%	14,464	91.1%	3,994	98.2%
E. Longmeadow	16,017	4,453	27.8%	14,677	91.6%	4,295	96.4%
Hampden	5,179	1,579	29.5%	5,133	99.1%	1,528	98.2%
Combined	37,073	10,097		34,274		9,817	
Average			27.4%		92.5%		97.2%

U.S. Census American Community Survey 2015 five-year estimates

Therefore, none of the fare or service changes identified in this analysis are likely to affect Senior Service customers of color in disproportion to the proportion of residents of color in the overall population of these three communities, which was people (2010-2014 ACS five-year estimates).

For language access, of the 128 residents of the three participating towns who used PVTA’s Senior Service vans August 1, 2016 to January 31, 2017, there were 126 were speak English primarily, according to PVTA customer information records. The two customers who do not speak English primarily speak German and Chinese; however, neither have requested translation.

Fig 3.1.3-1: Primary Languages Spoken by PVTA Senior Service Customers FY2016

	English	Polish	German	Spanish	Vietnamese	Portuguese	Chinese	Subtotals
Systemwide	1,587	1	1	23	1	1	1	1,615
Longmeadow	35	0	0	0	0	0	1	36
E. Longmeadow	67	0	0	0	0	0	0	67
Hampden	24	0	1	0	0	0	0	25
Towns combined	126	0	1	0	0	0	1	128

Demographic trends for the region show that the proportion of Spanish-speaking residents will continue to increase. In addition, a growing number of native Russian speakers are settling in Longmeadow. Therefore, it is therefore likely that some of the Senior Service customers in these three communities in the future will be Spanish speakers and will require translation of service information.

8 Conclusion: Municipal Senior Service Pilot Program is Equitable with Proposed Mitigation

PVTA’s proposed partnership with the Towns of Longmeadow, East Longmeadow and Hampden to provide support for municipally operated Senior Service van transportation for their residents age 60 and older is equitable with the mitigation proposed in this analysis.

The analysis presented in this report demonstrates that the proposed operation of this service by these towns will not disparately impact existing PVTA Senior Service customers of color.

The analysis also finds there will not be a disproportionate impact to low-income Senior Service customers related to the reduction of service hours from 42.5 to 32.5 hours per week or from the likely reduction in geographic coverage of the service, as there are significantly fewer low-come residents in these three communities, as compared to the countywide average.

The reduction of the fare for Senior Service trips within the town of origin from \$2.50 per ride to \$1.00 per ride is 60%, which is a significant benefit to low-income residents of these communities.

Similarly, trips that originate in one of the three towns to destinations outside the municipal boundary, which are now \$2.50, \$3.00, or \$3.50, depending on distance, will be just \$2.00, which is a 20% to 60% discount.

Both these fare reductions will make Senior Service van transportation more affordable and accessible to residents of these three communities age 60 and older, thereby allowing and encouraging greater use.

Importantly, service hours during the midday, when trips for medical appointments and shopping are the most frequent purposes, will be retained.

Appendices

Appendix 1: Existing PVTA Senior Service Fares: Longmeadow/East Longmeadow/Hampden To/From Other PVTA Communities

Existing \$2.50 trips No transfer needed via bus (will be \$1.00 under pilot)	Existing \$3.00 trips 1 transfer needed via bus (will be \$2.00 under pilot)	Existing \$3.50 trips 2+ transfers needed via bus) (will be \$2.00 under pilot)
East Longmeadow Enfield CT Hampden Longmeadow Springfield	Agawam Chicopee Holyoke Ludlow Palmer West Springfield Westfield Wilbraham	Amherst Belchertown Easthampton Granby Hadley Leverett Northampton Pelham South Deerfield South Hadley Sunderland Ware Williamsburg