



Northampton Senior Van Service Fare and Service Equity Analysis



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 City of Northampton in which the city's Department of Senior Services will operate the Senior Service van transportation (sometimes known as "Dial-a-Ride") that is currently offered by PVTA to its member communities for residents age 60 and older. The first phase of the Northampton pilot program will begin in November 2016 with an initial agreement through June 30, 2017.

PVTA Senior Service van transportation is a discretionary service provided at the direction of the PVTA Advisory Board. This van service differs from the PVTA's ADA (Americans with Disabilities Act) van service, which by law must operate in the same geographic areas and during the same hours as PVTA's fixed route buses. Instead, PVTA Senior Service van transportation is operated according to standards, fares, and budget established by the PVTA Advisory Board.

There will be no change to PVTA's ADA van service for city residents or any other persons who are eligible for and use the ADA vans. The Northampton Senior Service pilot program will affect only Senior Service customers who are residents of the City of Northampton. Also, there will be no changes to PVTA's Senior Service van transportation for the residents of other PVTA communities, including those who request travel to and from destinations in Northampton.

The fare for the Senior Service van transportation pilot program in Northampton will be \$1.00 per ride for trips within the city and \$2.00 per ride for trips to destinations in PVTA communities outside the city. Currently, the Senior Service fare is \$2.50 per ride for trips within Northampton and to destinations in neighboring communities that would not require a transfer to make the trip on a fixed route bus; and \$3.00 and \$3.50 for destinations that are further away and would require two or more transfers to complete using the fixed route bus system.

The service hours of the Northampton Senior Service pilot 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 from the number of service hours for Senior Service as it is currently provided by PVTA, which is available Monday through Friday from 8:00AM to 4:30PM, a total 42.5 hours per week. However, the 60% fare reduction described above significantly offsets this impact and will help make the service more accessible and affordable to low-income seniors of the city.

There were 82 Northampton residents who used PVTA's Senior Van Service in FY2016 (July 1, 2015 through June 30, 2016), which was 5.1% of the total 1,621 people who used the service throughout PVTA's 24-community service area during that period.

In FY2016, PVTA provided a total 85,922 Senior Service van trips (pick-ups and drop-offs are counted as separate trips) in its 24 member communities. The share of these trips made by the 82 Northampton residents who used the service was 2,744 trips, which was 3.2% of all Senior Service trips. Of all the 2,744 Senior Service trips by Northampton residents that originated in the city in FY2016, there were 1,575 trips (57.4%) to destinations within the city limits. The remaining 1,169 trips (42.6%) were to destinations in one of PVTA's 23 other communities.

This analysis finds that the Northampton Senior Service 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 comparable to U.S. Census

estimates for proportion of Northampton who are white (86% for entire population and approximately 95% for residents age 60+.) Therefore, Senior Service customers of color will not be affected in disproportion to the local population.

This analysis finds that the reduction in the number of service hours from 42.5 to 32.5 hours per week (24% less) of the proposed pilot service would pose a potential disparate impact to low-income Senior Service customers in Northampton. This is because the proportion of the city's Senior Service customers who are considered low-income is significantly larger (estimated at 78%, based surveys of ADA and Senior Service customers) than the proportion of low-income city residents age 60+ (approximately 20%, according to U.S. Census estimates).

The proposed mitigation for this impact is a 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 Northampton, which are the majority (57%) of locally originating Senior Service trips. Further, the fare for trips outside the city 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) to \$2.00 per ride to and from any destination outside Northampton, which is a 20-60% fare reduction.

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 are required regardless of whether proposed changes would be beneficial or detrimental to riders.

This analysis has been prepared because it is likely that more than 25% of Northampton residents who currently use PVTA's Senior Service van transportation program would be affected by the new fare (\$1.00 or \$2.00 per trip, reduced from \$2.50, \$3.00, or \$3.50 per trip, depending on fixed route transfer requirements) and service policies (reservations and van service to and from destinations within the city 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 (most recently amended September 23, 2015).

The purpose of an equity analysis is to determine whether or not the new lower 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 Northampton 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.)

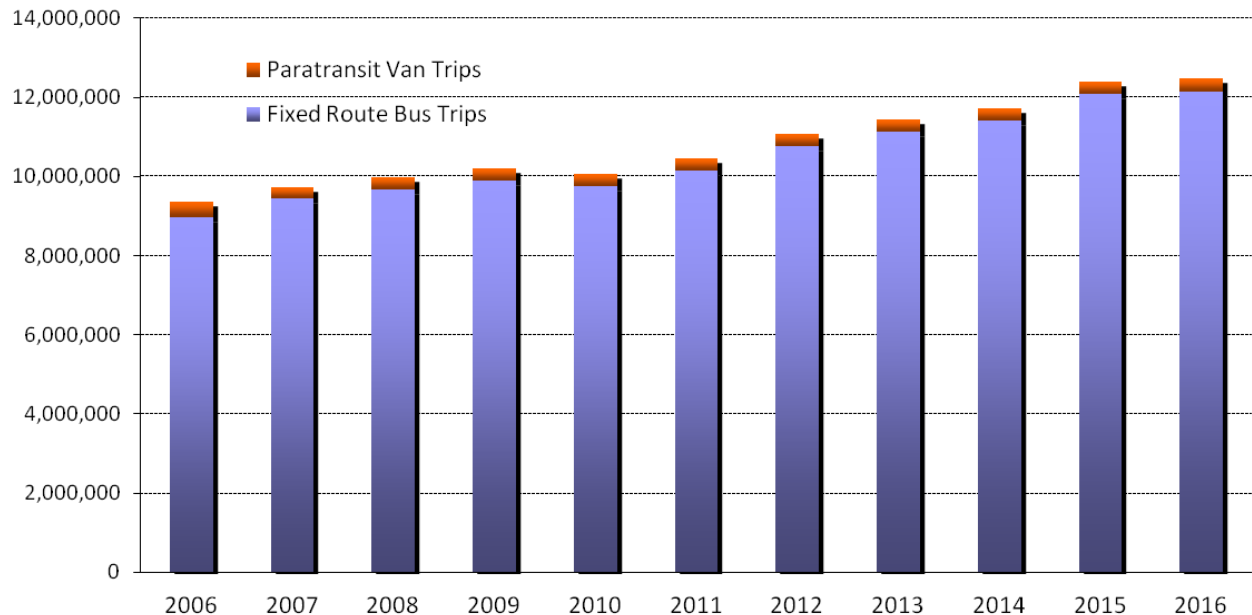
2. PVTA Background Information

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 600 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.

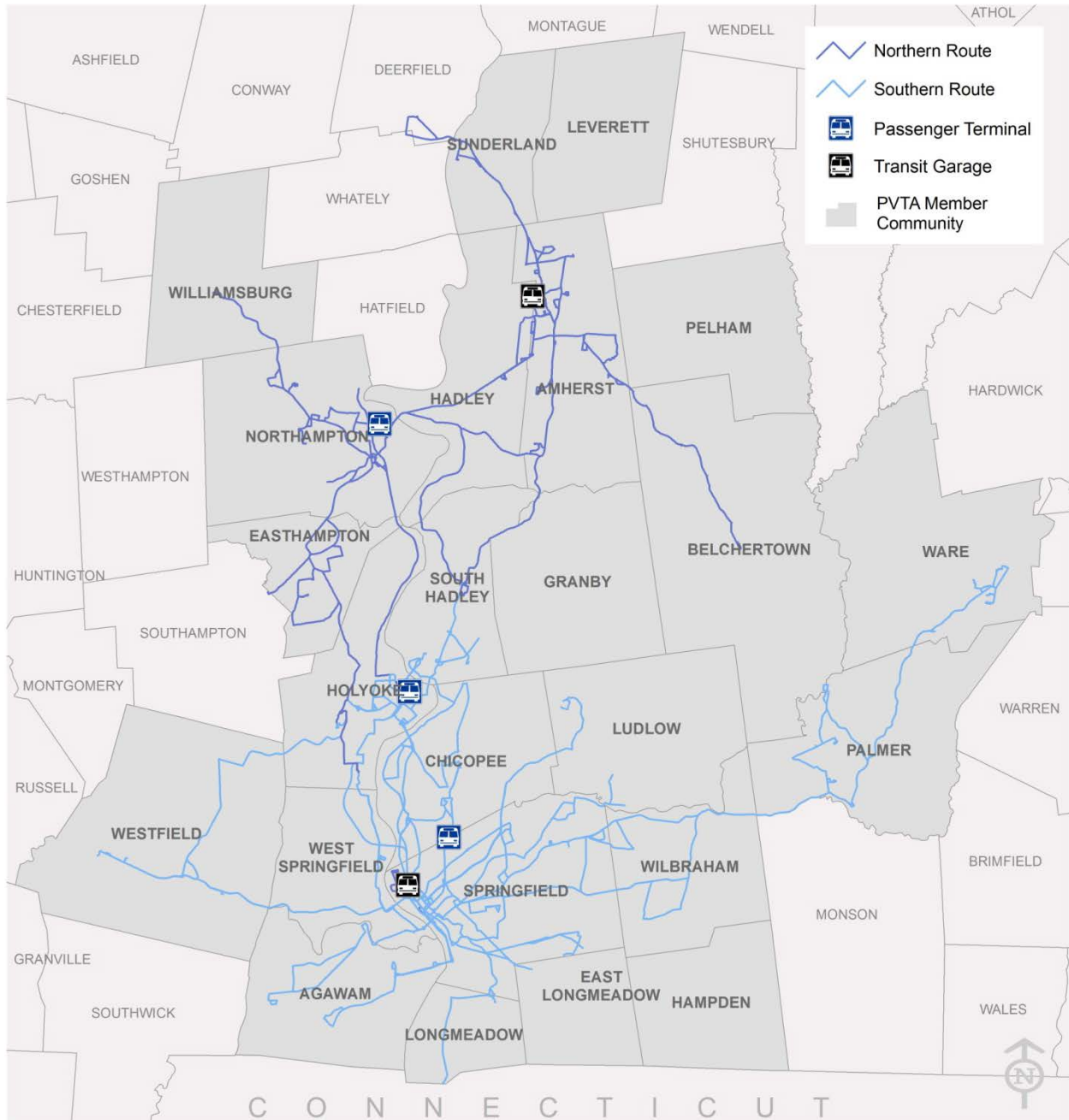
Funding for PVTA operations and capital improvements comes from several sources: federal grant programs; state and local governments; institutions; advertising; and passenger fares, which accounted for 18% of the total cost of services in FY2015.

Fig. 2-2: PVTA Service Area

Pioneer Valley Transit Authority

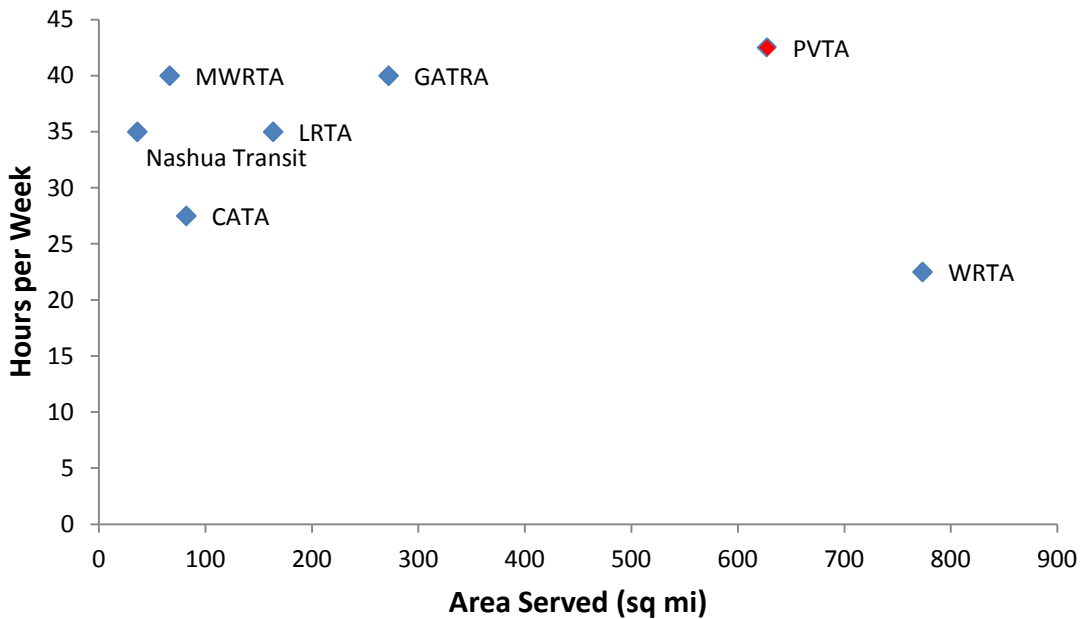


Service Area Map



PVTA’s Senior Service van transportation is relatively unique in Massachusetts. In the state, this type of van service is primarily offered by regional transit authorities that serve rural communities that do not have access to fixed route service. This type of service tends to be much more limited as compared to the RTA’s federally required ADA service, either in the hours of operation, or service area, or both, as the analysis below shows. Further, the senior van service offered 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. There are also approximately 3,000 van riders, of who about 1,400 use the ADA van service and 1,600 use Senior Service van transportation.

So while van trips for Senior Service constitute approximately 1.6% of all PVTA rides, the number of Senior Service customers account 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.

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

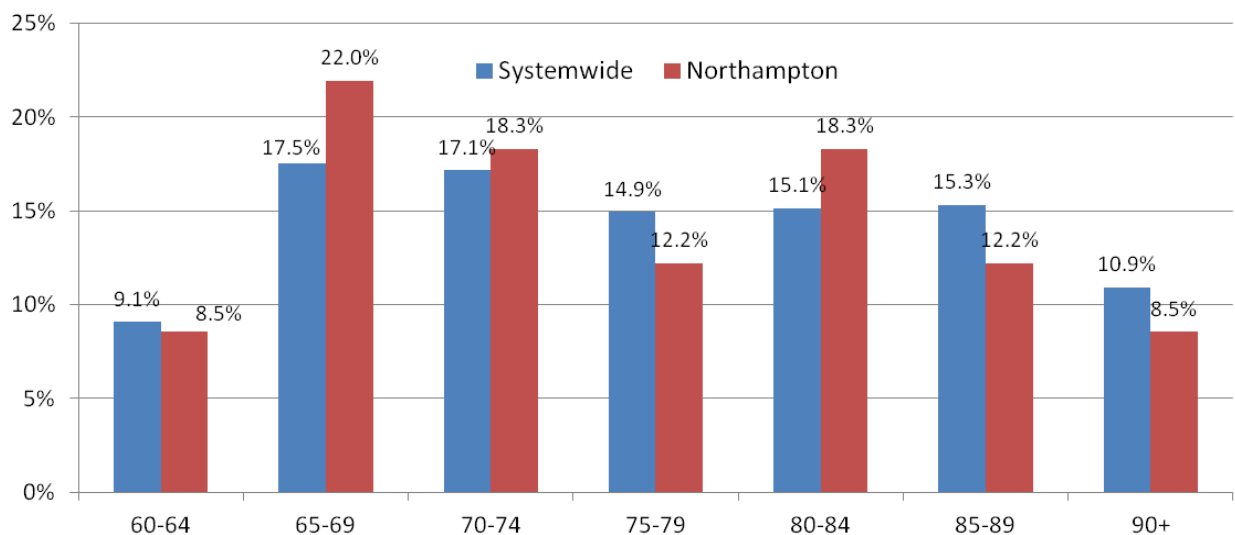
PVTA does not collect demographic information about its Senior Service van transportation customers as part of the reservations and fare payment processes. Therefore, the information about van riders presented in this section was compiled from two mailed surveys of van riders in 2011 and 2013. Additional information is presented from 2010-2014 American Community Survey five-year estimates.

3.1.1 Age

PVTA Senior Service van transportation is available only to people who are residents of a PVTA member community (see Fig 2-2) and who are age 60 and older.

The graph below shows the age breakdown (in 5-year categories) of the 1,621 PVTA Senior Service riders in FY2016 and compares them to the age of the 82 Northampton Senior Service riders in that year. The analysis shows that in general, there are more Northampton’s Senior Service customers who are age 65-74 than average. Therefore, a change in service would affect a smaller proportion of the most elderly Senior Service customers in Northampton.

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

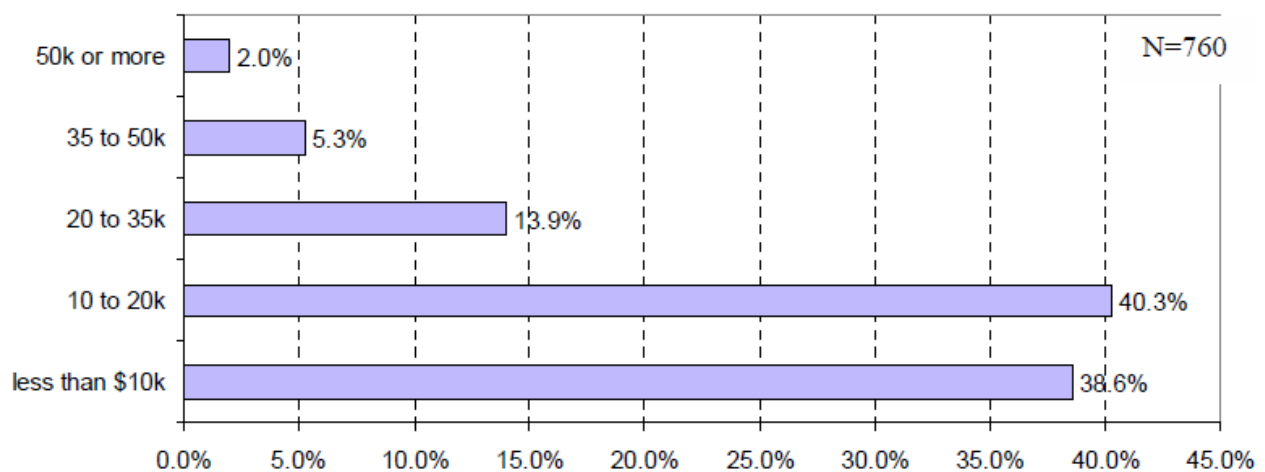


Source: PVTA Customer service records for FY2016

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 2015

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

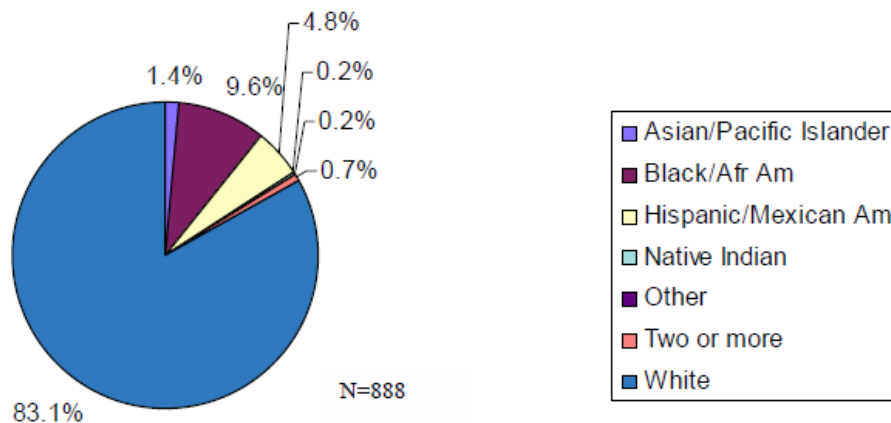
Race	Proportion of Commuters Who Take Public Transportation to Commute to Work			
	Hampden County	Hampshire County	City of Northampton	PVTA Riders Who Use Bus to Commute to Work (25% of riders surveyed)
American Indian/Alaska Native	0.4%	0.0%	<i>Below margin of error</i>	0.6%
Asian	1.4%	24.4%	<i>Below 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 Northampton residents 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 Northampton white residents was 86% 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 Paratransit Customers from 2011 Survey



3.1.3 Language and English Proficiency

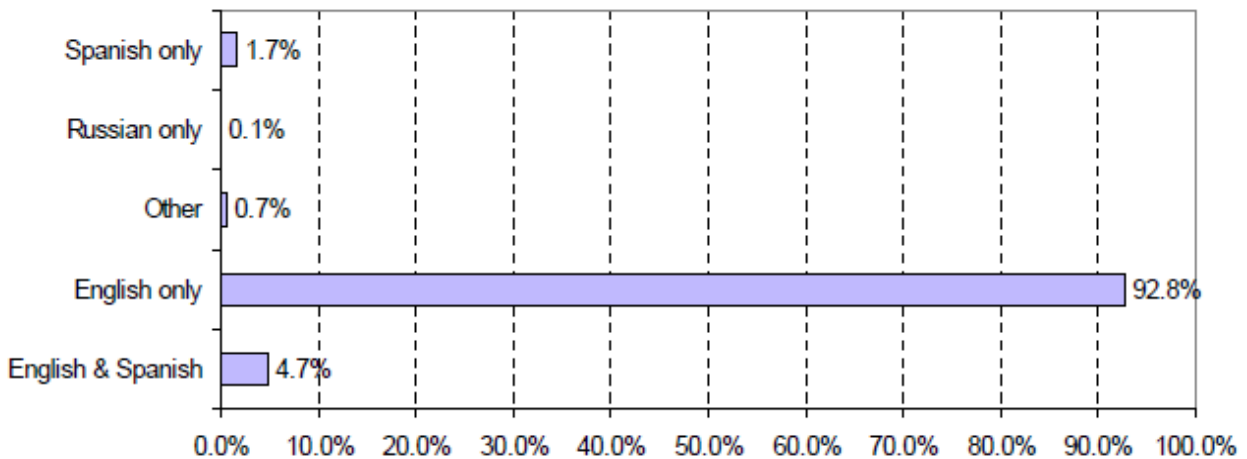
Of the 82 Northampton residents who used PVTA’s Senior Service vans in FY2016, all were English speakers. Therefore, there would be no impact to persons for who English is not their spoken language.

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

	English	Polish	German	Spanish	Vietnamese	Portuguese	Chinese	Totals
Systemwide	1,593	3	1	20	1	2	1	1,621
Northampton	82	0	0	0	0	0	0	82

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 Northampton Senior Service customers during the pilot period. In future phases, it will be important for the City to also provide program information in Spanish as part of regular materials and offer translation to other languages upon request.

5. Northampton Senior Service Van Transportation Pilot Program Description

Under an intergovernmental agreement with PVTA, the City of Northampton' Department of Senior Services will provide the Senior Service van transportation currently provided by PVTA for residents of the city 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 November 2016 with an initial agreement through June 30, 2017 and may be extended, modified, improved, or terminated at any point.

Fig 5-1: Northampton Senior Service Van Transportation Summary

Service Item	Existing PVTA Senior Service	Northampton Senior Service Pilot
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)	Northampton (incl. Florence, Leeds) Service to additional communities TBD
Fare: Trips within Northampton (includes Leeds, Florence)	\$2.50 per trip (10% discount if purchased in pack of 20 or 10)	\$1.00 per trip
Fare: Trips Outside Northampton that would require 1 transfer via fixed route (see Appendix 1)	\$3.00 per trip	\$2.00 per trip
Fare: Trips Outside Northampton that would require 2+ 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	Northampton Senior Center PVTA Customer Service PVTA Online, Tickets by Mail Holyoke Transportation Center	Northampton 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 City of Northampton.

There will be no change to PVTA's Senior Service for city residents or any other persons who are eligible for and use the ADA van service. The Northampton Senior Service pilot program will affect only Senior Service customers who are residents of the City of Northampton. There will be no changes to PVTA's Senior Service van transportation for residents of other PVTA communities.

6. Public Outreach and Consultation

Public outreach for the implementation of the Northampton Senior Service van transportation pilot program included the following activities:

- PVTA Paratransit Committee briefings and consultation on May 24, June 29, and September 9, 2016.
- PVTA Advisory Board briefing and consultation on June 29, September 21, and October 19, 2016.
- Public Hearing on October 12, 2016.

PVTA staff held a public hearing and informational meeting about the Northampton Senior Service van transportation pilot program at these times:

- Wednesday October 12, 2016 from 3:30 to 4:30PM (session #1), City Council Chambers, 2010 Main Street, Northampton
- Wednesday October 12, 2016 from 6:00 to 7:00PM (session #2), City Council Chambers, 2010 Main Street, Northampton

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

- The pilot program may be more responsive to the transportation and accessibility needs of Northampton senior citizens because it will be operated by local officials.
- The pilot program will allow more partnerships with local senior communities in Northampton to better meet the needs of residents who live in those communities, such as Rockridge.
- The pilot program will help transport more residents to community services and events at the Northampton Senior Center.
- Trips to medical appointments will be grouped more efficiently than the current Senior Service allows.

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 Northampton 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: Northampton 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 city.	The fare for trips within Northampton will be reduced from \$2.50 per ride to \$1.00 per ride (60% reduction). The fare for trips to destinations outside Northampton 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 Northampton seniors to travel to local destinations.
Fares: In-city	Fares will be change from \$2.50 to \$1.00 per trip for the majority (57.4%) of trips made by Northampton residents within the city limits.	This fare change represents a 60% fare reduction for in-city trips, which will not adversely impact low-income customers or customers of color. No mitigation is required.
Fares: Out of city	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 Northampton residents outside the city limits.	This fare change represents a 20% to 60% reduction for out-of-city 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 Northampton residents will be able to purchase ride tickets will be reduced from five to one.	Cash on board payment will be accepted.
Fare Media	Northampton customers may have unused PVTA ride tickets purchased before the city begins to operate the service.	The Senior Center 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 Northampton seniors who are currently able 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 Northampton seniors 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 Northampton 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 Northampton customers.
Information access	Customer information is available in English and Spanish language documents.	The Senior Center will make its 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 Northampton Senior Service van transportation pilot 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)

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-percent 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 Northampton.

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 Northampton Senior Center	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 Northampton residents Senior Service customers will not be sold by PVTA Customer Service offices, by mail, or on pvta.com .	<ol style="list-style-type: none"> 1) Cash onboard will be accepted. 2) PVTA Customer Service representatives will direct Northampton residents to the local Senior Center for ride ticket sales. 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.

Service Hours	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 Northampton because the proportion of the city’s Senior Service customers who are considered low-income 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 city as a whole (approximately 20%, according to U.S. Census estimates).	The Senior Service one-ride fare will be reduced from \$2.50 per ride to \$1.00 per ride (60% less) for trips within Northampton, which are the majority (57.4%) of Senior Service trips. Further, the fare for trips outside the city 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 Northampton, 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.
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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)

Northampton Senior Service van transportation will be equally available to all residents of the city 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 comparable to U.S. Census estimates for proportion of Northampton who are white (86% for entire population and approximately 95% for residents age 60+.) Therefore, none of the fare or service changes identified in this analysis will affect Senior Service customers of color in disproportion to the

proportion of residents of color in Northampton's overall population, which was 28,637 people (2010-2014 ACS five-year estimates).

In terms of language access, demographic information about existing riders did not identify any of Northampton's 82 Senior Service customers in FY2016 who speak a language other than English. However, demographic trends for the city and the region show that the proportion of Spanish-speaking residents will continue to increase, and it is therefore likely that Northampton Senior Service customers in the future will be Spanish speakers.

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

PVTA's proposed partnership with the City of Northampton to provide Senior Service van transportation on a pilot basis to residents of the city age 60 and older is equitable with the mitigation proposed in this analysis.

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

The analysis identified a potential disproportionate impact to low-income Senior Service customers related to the reduction of service hours from 42.5 to 32.5 hours per week. This impact, however, is sufficiently mitigated and offset by an even greater reduction in the fare for rides to and from destinations in the city (which are more than 57% of all trips made by Northampton Senior Service customers), from \$2.50 per ride to \$1.00 per ride – a 60% reduction. Similarly, trips to destinations outside Northampton, 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 Northampton age 60 and older and encourage 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: Northampton 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)
Amherst	Belchertown	Agawam
Easthampton	Chicopee	Enfield CT
Hadley	East Longmeadow	Hampden
Holyoke	Granby	Ludlow
Northampton	Leverett	Palmer
Williamsburg	Pelham	Springfield
	South Deerfield	West Springfield
	South Hadley	Westfield
	Sunderland	Wilbraham
	Ware	