



Equity Analysis for Service Changes Effective Fall 2017



**DRAFT
JULY 12, 2017**

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

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Summary

The Pioneer Valley Transit Authority (PVTA) is evaluating the potential impacts to riders of the following 22 service change options. These options involve 16 fixed bus routes and have been developed to reduce PVTA's costs sufficient to balance PVTA's operating budget for FY2018 (which began July 1, 2017). These options were developed by screening all 46 PVTA routes and identifying changes that will affect the fewest number of riders while still achieving the immediate and necessary business purpose of balancing the FY2018 operating budget.

As of this writing, the amount of PVTA's 2018 operating budget shortfall is unknown and could be as much as \$1.7 million, depending on the final amount of state contract assistance allocated to Massachusetts regional transit authorities in the signed state FY2018 budget, as well as approval of an FHWA Congestion Mitigation and Air Quality (CMAQ) application for \$500,000 to operate the P21E express service for one year as recommended by the Pioneer Valley MPO on May 23, 2017.

Option	Route	Potential Service Reduction
1	M40	Eliminate route
2	M40	Eliminate Saturday service
3	P20E	Eliminate route
4	P20E	Eliminate Saturday service
5	P21E	Eliminate route
6	P21E	Eliminate Saturday + Sunday service
7	39	Eliminate route
8	39	Eliminate Saturday + Sunday service
9	46	Eliminate trips to Whately and South Deerfield
10	G5	Eliminate trips to Enfield CT and south Longmeadow
11	X98	Eliminate route
12	Tiger Trol.	Eliminate route
13	R14E	Eliminate route
14	R27	Eliminate route
15	B23	Eliminate Saturday service
16	R29	Eliminate Saturday + Sunday service
17	B48	Reduce Saturday frequency from 30 to 60 min
18	B4	Eliminate first 3 weekday morning trips; first 2 Saturday morning trips; last 2.5 Sunday evening trips
19	X90	Eliminate first 2 early morning trips
20	X90	Eliminate Sunday service north of Memorial Dr
21	34 CS	Eliminate trips after 8:00PM on weekdays
22	35 CS	Eliminate trips before 5:00PM on Sat+Sun+Holidays

The PVTA Advisory board is scheduled to act on these options at a Special Meeting on July 19, 2017. Changes that are approved by the Board that date will be effective August 27 or September 3, 2017.

There will be no changes to PVTA's existing fares and fare policies as part of these service changes.

This equity analysis has been performed consistent with federal law to understand whether the proposed service changes being considered could be implemented in a manner that is equitable to all PVTA bus customers and its 24 member communities.

This equity analysis concludes that 2 of the 22 options considered do not constitute a major service change (25% or greater change in route miles or trips on day of service).

Of the remaining 20 options that are considered major service changes:

- 8 options would have disparate (race discrimination) impacts only.
- 12 options would have disproportionate (low income discrimination) impacts only.
- 5 options would have both disparate and disproportionate impacts (included in totals above).

Numerous mitigation measures were developed in response to comments received during the public hearing process. These measures are proposed to lessen the adverse impacts of the change and reduce either the disparate or disproportionate impact (or both) of each option if it is selected for implementation by the Advisory Board. This analysis finds that:

- All 22 of the options are the least discriminatory alternatives available to PVTA to meet the necessary business purpose of balancing the FY2018 budget.
- 18 of the options involve adverse impacts that can be sufficiently mitigated with the recommended measures so as to be consistent with the PVTA's Disparate and Disproportionate Impacts policy.
- 4 of the options involve adverse impacts for which mitigation is recommended but does not in the estimate of this analysis overcome the policy threshold acceptable adverse impacts to customers of color and/or low income, but for which there is to more equitable alternative available to meet the necessary business purpose of balancing the FY2018 operating budget.

Fig. S-1: PVTA Service Change Equity Analysis Summary

Option	Route	Potential Service Reduction	Major Service Change?	Customers/Day Likely Affected ¹	Disparate (Racial Discrimination) Impact	Disproportionate (Low-income Discrimination) Impact	ADA Impact	Least Discriminatory Alternative	Substitute Transit Available
1	M40	Eliminate route	✓	90				✓	✓
2	M40	Eliminate Saturday service	✓	8				✓	✓
3	P20E	Eliminate route	✓	84	✓			✓	✓
4	P20E	Eliminate Saturday service	✓	139	✓			✓	✓
5	P21E	Eliminate route	✓	146	✓	✓		✓	✓
6	P21E	Eliminate Saturday + Sunday service	✓	80	✓	✓		✓	✓
7	39	Eliminate route	✓	96		✓		✓	✓
8	39	Eliminate Saturday + Sunday service	✓	105		✓		✓	✓
9	46	Eliminate trips to Whately and South Deerfield	✓	6			✓	✓	Partial
10	G5	Eliminate trips to Enfield CT and south Longmeadow	✓	12	✓		✓	✓	
11	X98	Eliminate route	✓	15		✓		✓	Partial
12	Tiger Tr.	Eliminate route	✓	15				✓	Partial
13	R14E	Eliminate route	✓	21		✓		✓	
14	R27	Eliminate route	✓	13				✓	Partial
15	B23	Eliminate Saturday service	✓	28		✓		✓	Partial
16	R29	Eliminate Saturday + Sunday service	✓	83	✓	✓		✓	Partial
17	B48	Reduce Saturday frequency from 30 to 60 min	✓	31				✓	✓
18	B4	Eliminate first 3 weekday morning trips; first 2 Saturday morning trips; last 2.5 Sunday evening trips		8	✓	✓		✓	
19	X90	Eliminate first 2 early morning trips		9				✓	Partial
20	X90	Eliminate Sunday service north of Memorial Dr	✓	26	✓	✓		✓	Partial
21	34 CS	Eliminate trips after 8:00PM on weekdays		70		✓		✓	
22	35 CS	Eliminate trips before 5:00PM on Sat+Sun+Holidays	✓	100		✓		✓	Partial
				¹ Estimated from October 2016 onboard rider counts					

Fig. S-2: Summary of Service Change Proposal Revisions and Mitigation

Option	Route	Original Service Change Proposal Presented in Public Hearings	as Revised Service Change Proposal Based on Public Comments Received ¹
1	M40	Eliminate route	Replace M40 weekday service with 8 one-way express trips on the B43 (4 in morning peak to UMass Amherst; 4 in afternoon peak to Smith College).
2	M40	Eliminate Saturday service	Encourage use of alternate B43 service available during same hours.
3	P20E	Eliminate route	Encourage use of alternate P20 service; distribute one 7-day pass at no cost to former P20E customers.
4	P20E	Eliminate Saturday service	Retain P20E Saturday express service as it currently operates (no service change).
5	P21E	Eliminate route	Obtain \$500,000 CMAQ grant to operate service for one year (decision pending).
6	P21E	Eliminate Saturday + Sunday service	Obtain \$500,000 CMAQ grant to operate service for one year (decision pending).
7	39	Eliminate route	Retain route (make no service change). Work with academic institutions for future operating funds.
8	39	Eliminate Saturday + Sunday service	See above.
9	46	Eliminate trips to Whately and South Deerfield	Retain 4 trips per weekday (2 in morning peak; 2 in afternoon peak).
10	G5	Eliminate trips to Enfield CT and south Longmeadow	Retain 4 trips per weekday (2 in morning peak; 2 in afternoon peak).
11	X98	Eliminate route	Retain 3 trips per weekday to Survival Center during food distribution hours; modify R44 to to serve Jackson and Barrett Streets; distribute one 7-day pass at no cost to former X98 customers.
12	Tiger Tr.	Eliminate route	Encourage use of alternate service available on R29, X90, R24, 38; distribute one 7-day pass at no cost to former Tiger Trolley riders; seek restoration of Mt. Holyoke College-operated van for food shopping.
13	R14E	Eliminate route	Revise Route 14 to serve Heritage Nursing Home and Agawam Industrial Park; coordinate trip times with shift times; distribute one 7-day pass at no cost to former R14E customers.
14	R27	Eliminate route	Add 3 former R27 trips to the B17 schedule to provide the same number of trips per day to Wilbraham.
15	B23	Eliminate Saturday service	Encourage use of alternate service via R10, P20, and R41; distribute up to four 1-day passes on Saturdays to former B23 customers.
16	R29	Eliminate Saturday + Sunday service	Retain 2 trips per day (1 in early morning; 1 in late afternoon).
17	B48	Reduce Saturday frequency from 30 to 60 min	Provide customer information about reduced B48 frequency on Saturdays. No change in service span.
18	B4	Eliminate first 3 weekday morning trips; first 2 Saturday morning trips; last 2.5 Sunday evening trips	Retain first 3 weekday morning trips as inbound only service; retain first 3 Saturday morning trips as inbound only; retain last 2 Sunday evening trips as outbound only.
19	X90	Eliminate first 2 early morning trips	Encourage use of partial alternate service available via Routes G1, P20, and P21; obtain funds to continue operating P21E as alternate service weekdays.
20	X90	Eliminate Sunday service north of Memorial Dr	Retain 1 early Sunday morning trip on Route R29; provide customer information about alternate service available via Routes G1, P20, and P21; obtain funds to operate P21E alternate service on Sundays.
21	34 CS	Eliminate trips after 8:00PM on weekdays	Retain all trips (make no service change).
22	35 CS	Eliminate trips before 5:00PM on Sat+Sun+Holidays	Retain all trips (make no service change).

¹ These revised service change proposals are subject to PVTA Advisory Board action on July 19, 2017

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 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, 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 proposed service or fare changes would 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 is required and being performed because PVTA is assessing the impacts of 22 different potentially service changes that taken individually or together may qualify as a major service change, and/or may have disparate or disproportionate impacts on PVTA customers of color and/or low-income riders, depending on the service changes that are implemented.

A demographic analysis of PVTA customers who may be affected 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 transit customers.

A NOTE ON LANGUAGE: PVTA avoids the use of the term “minorities,” which is frequently used in federal documents, to refer people of color or anyone who is not white. This word can be divisive and is therefore not consistent with the intent and purpose of an equity analysis. In fact, the majority of PVTA customers—more than 62%—are people of color. Therefore, this report uses the term “minorities” only when necessary to conform to federal regulations and definitions.

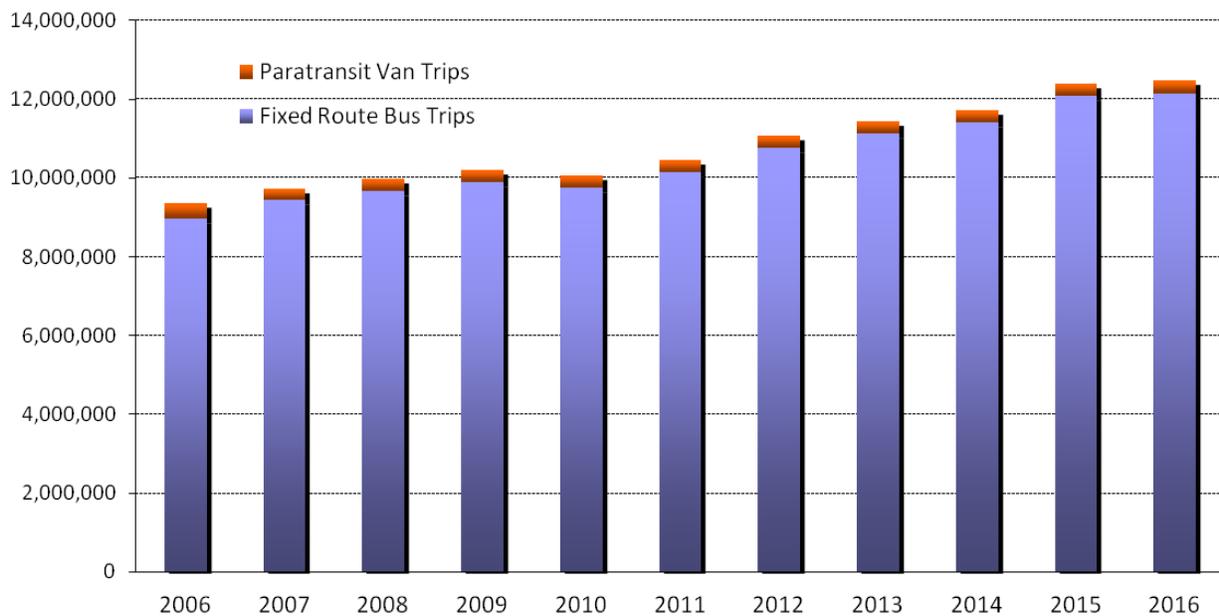
2. PVTA Background Information

The Pioneer Valley Transit Authority (PVTA) serves 24 member communities in Western Massachusetts with a population of 580,230 (ACS 2014 five-year estimates). PVTA is a designated recipient of FTA funds that provides fixed route bus and ADA demand response public transportation 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 operates a fleet of 186 heavy duty transit buses, 144 paratransit vans, and five 18-passenger vans. There are 46 scheduled bus routes (also called “fixed routes”), with paratransit van provided within ¼ mile of those routes when they are operating to comply with the Americans with Disabilities Act (ADA). PVTA provided 12.3 million passenger trips in FY2015 (July 1 to June 30), up 18.1% since FY2010.

For the just-concluded FY2017 (July 1 2016 to June 30, 2017), total system ridership has decreased by approximately 7% to an estimated 11.2 million trips. This is likely due to several circumstances, including increased employment allowing more people to buy a car; unusually low interest rates on car loans; delays on routes in downtown Springfield due to street and lane closures near construction of the MGM Casino and side street impacts from the I-91 reconstruction; and delays on Route 9 in Hadley due to MassDOT construction projects.

Fig. 2-1: PVTA Ridership FY2006 to FY2016



Source: PVTA

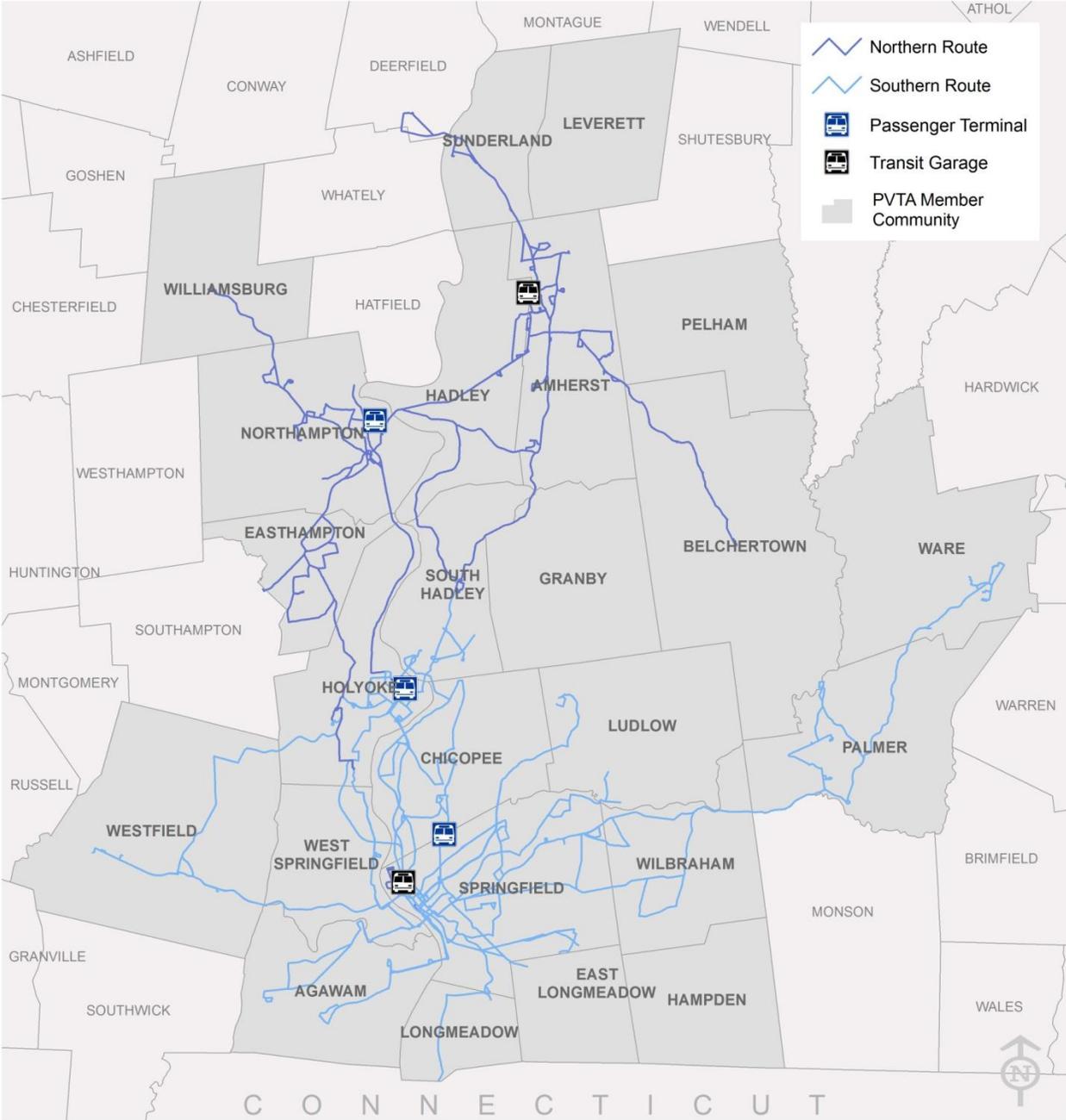
Created in 1974, PVTA had an operating budget of \$47.3 million in FY2016. Under Massachusetts law, PVTA and the Commonwealth’s 14 other regional transit authorities may not directly operate transit services. Therefore, PVTA competitively contracts with private companies to operate its fixed routes bus routes and paratransit van services. Currently, these contract operators are UMass Transit Services, First Transit, and Hulmes Transportation Services.

Fig. 2-2: PVTA Service Area

Pioneer Valley Transit Authority



Service Area Map



3. PVTA Ridership Profile

PVTA customers are highly dependent on public transit. “Transit dependent” is generally defined as having no means other than public transit to make a typical trip. A total 68% of PVTA riders surveyed said they have “No other way to make my trip” (PVTA 2015-2016 onboard rider surveys, n=2,798).

FTA defines transit dependency as: 1) people without private transportation or private car; 2) elderly age 65 and older; 3) youths under age 18; and 4) persons below poverty or median income. With respect to these characteristics, PVTA’s most recent customer surveys found:

- 52% of PVTA customers do not own or have access to a private auto.
- 3.7 % are age 65 or older.
- Approximately one-fifth are 18 or younger.
- More than half (55.2%) of PVTA riders have incomes at or below the federal poverty level.

Therefore, it is reasonable to conclude that the majority of PVTA riders are transit dependent. Based on ridership, fare payment data, and customer trip frequencies reported on rider surveys, there are an estimated 15,000 to 20,000 people in the region who use PVTA on a regular basis (at least once a week).

3.1 Fixed Route Customer Demographics

Demographic information presented in this section was compiled from surveys of 2,799 riders performed in 2015 (Hampden County PVTA routes) and 2016 (Hampshire and Franklin County routes). Additional information is presented from 2014 American Community Survey five year estimates.

3.1.1 Income

PVTA customers on average have personal incomes that are significantly less than the regional average. In fact, the majority of PVTA customers report personal income that is at or below the federal poverty level, which is shown below for 2015.

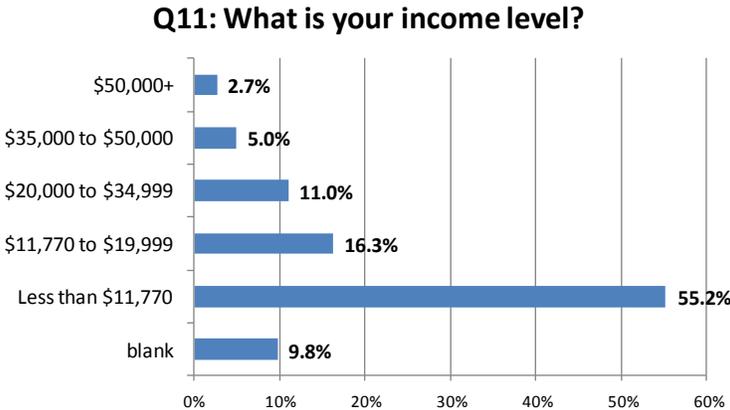
Fig 3.1.1-1: Federal Poverty Thresholds 2015

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

Results from the 2015 and 2016 PVTA Customer Survey presented below show that more than 55% of PVTA customers are at or below the federal poverty level.

Fig. 3.1.1-2: PVTA Customers' Annual Income



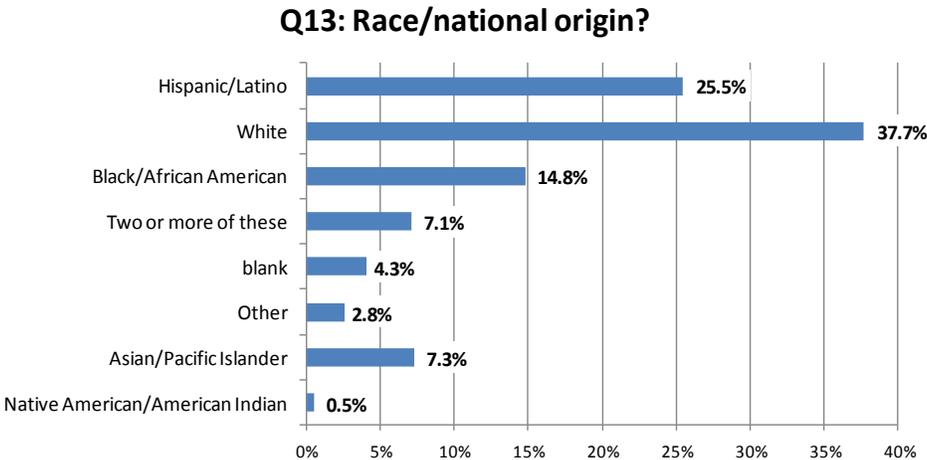
PVTA On Board Customer Surveys 2015 and 2016. N=2,798

This finding is generally consistent with U.S. Census American Community Survey 2014 five-year estimates for income, which report that 55% of commuters who take transit to work make less than \$10,000/year. Another 29% earn between \$10,000-14,999, of which approximately 6% can reasonably be estimated to be below the \$11,700 federal poverty threshold shown below. Therefore, the estimated proportion of transit commuters only in the region below the poverty level is at least **61%**.

3.1.2 Race and Ethnicity

People of color are the majority of PVTA riders, constituting at least 62% of customers surveyed in 2015 and 2016.

Fig 3.1.2-1: Racial Characteristics of PVTA Customers



PVTA On Board Customer Surveys 2015 and 2016. N=2,798

The proportion of transit commuters in the PVTA service region who are people of color is approximately four times greater than the proportion of persons of color 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	PVTA Riders Who Use Bus to Commute to Work (25% of riders surveyed)
American Indian/Alaska Native	0.4%	0.0%	0.6%
Asian	1.4%	24.4%	3.1%
Black/African American	27.5%	3.1%	19.8%
Hawaiian/Pacific Islander	0.0%	0.0%	0.0%
Hispanic/Latino	41.8%	9.5%	33.8%
White	45.5%	70.1%	29.8%
Another Race	20.2%	0.6%	3.3
Two or more races	5.1%	1.7%	9.7%

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

3.1.3 Language and English Proficiency

For languages spoken, the proportion of PVTA customers surveyed in 2015-2016 who said they speak only Spanish was 1.1%. This is much lower than the regional average of 6.3%. However, 6% of PVTA riders who took the survey chose the Spanish language form, which suggests the actual proportion of PVTA customers who speak only Spanish is greater than 1.1% and probably closer to the regional average of 6.3%.

Also, in Hampden County (where two-thirds of PVTA riders live) the proportion of PVTA customers who speak both Spanish and English is nearly double (31.5%) the countywide average (16.8%). While the PVTA survey was not able to ask how well bilingual customers speak English, the ACS 2014 five-year estimates for Hampden County suggests that approximately one-third of Spanish/English bilingual persons “Do Not Speak English Well or At All.” Therefore, it is likely that at least one-third of PVTA customers in Hampden County (approximately 10%) also do not speak English well or at all. It is for this critical reason that PVTA provides all rider information in Spanish, as well as English.

4. Service Change Options and Impact Assessments

The PVTA Advisory Board on May 24, 2017 authorized public hearings on the 22 cost saving service change options involving the 16 fixed bus routes that are listed below. These options were developed by initially screening all 46 PVTA routes and identifying service changes that will affect the fewest riders while still generating sufficient savings to fulfill the necessary business purpose of balancing the FY2018 operating budget. PVTA's currently anticipated operating shortfall could be as much as \$1.7 million, depending on the final amount of state contract assistance for Massachusetts regional transit authorities in the FY2018 state budget when it is signed by the governor.

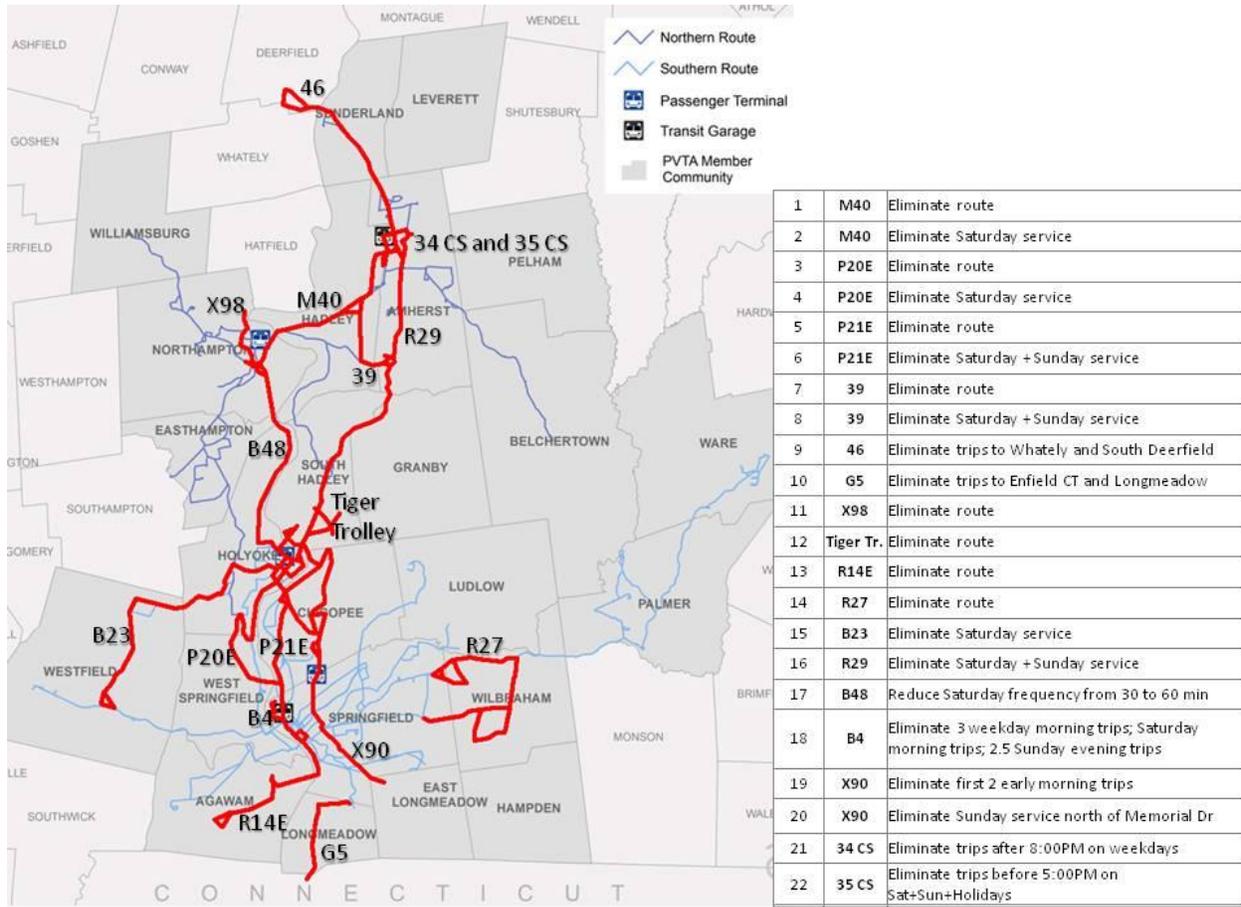
Fig. 4-1: Service Change Options Summary List

Option	Route	Potential Service Reduction
1	M40	Eliminate route
2	M40	Eliminate Saturday service
3	P20E	Eliminate route
4	P20E	Eliminate Saturday service
5	P21E	Eliminate route
6	P21E	Eliminate Saturday + Sunday service
7	39	Eliminate route
8	39	Eliminate Saturday + Sunday service
9	46	Eliminate trips to Whately and South Deerfield
10	G5	Eliminate trips to Enfield CT and south Longmeadow
11	X98	Eliminate route
12	Tiger Trol.	Eliminate route
13	R14E	Eliminate route
14	R27	Eliminate route
15	B23	Eliminate Saturday service
16	R29	Eliminate Saturday + Sunday service
17	B48	Reduce Saturday frequency from 30 to 60 min
18	B4	Eliminate first 3 weekday morning trips; first 2 Saturday morning trips; last 2.5 Sunday evening trips
19	X90	Eliminate first 2 early morning trips
20	X90	Eliminate Sunday service north of Memorial Dr
21	34 CS	Eliminate trips after 8:00PM on weekdays
22	35 CS	Eliminate trips before 5:00PM on Sat+Sun+Holidays

The options that will be implemented will be determined by the PVTA Advisory Board on July 19, 2017 and go into effect on August 27, 2017 or September 3, 2017.

There are no changes to fares or fare policies proposed in any of the 22 options being considered.

Fig. 4-2: Locations of Service Reduction Options



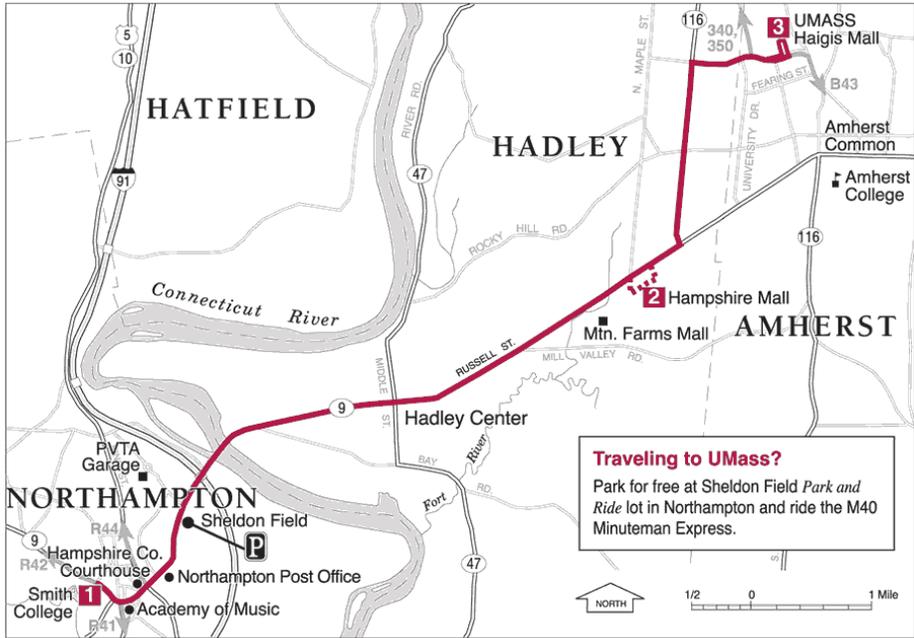
The following information is presented for each service change option:

Route Description	Describes the travel corridor in which the route on which the proposed change would occur, trip frequency, and key characteristics of the service.
Proposed Change and Rationale	Description of the change that would occur to the route if approved by the PVTA Advisory Board; the reason(s) why this change is included as one of the 22 options being considered; and relevant information regarding the route’s service performance for its class of service (either passengers per trip or passengers per hour, depending on class). Ridership information presented in this section is from the most recently concluded PVTA fiscal year (FY2016) unless otherwise noted.
Communities Affected	Municipalities in which the proposed change(s) would occur.
Effective Date	Date that the service change would need to be implemented to achieve sufficient savings for the FY2018 fiscal year and still be operationally feasible.
Major Service Change	Determination whether or not the proposed service change would meet or exceed the 25% threshold in either route miles eliminated or service hours reduced (or both) on a single service day, which is the definition of a “major service change” adopted by the PVTA Advisory Board September 23, 2015.

<p>Customers Affected</p>	<p>An estimate of the number of customers per day who would likely be affected by the proposed service change was derived by the following method:</p> <ul style="list-style-type: none"> • <u>Weekday</u> average riders were obtained from the passenger counters on the buses on each route for the week of October 3-7, 2016 (a typical week with full academic service and no holidays, storms, or major events that would disrupt traffic). • <u>Saturday and Sunday</u> customers were averaged from passenger counts each of the Saturdays and/or Sundays in October 2016. • Estimates of likely customers affected were then made by dividing the weekday and/or Sat-Sun daily averages by 2.5 to account for the rates of round trips and transfers reported on rider surveys. In cases where the nature of the service is likely to have a different rate of round trips and transfer, ranges are given for the estimates.
<p>Disparate (Racial Discrimination) Impact Analysis</p>	<p>This section explains whether or not there are likely to be differences in the adverse impacts that the proposed service change would have on customers of color in comparison to customers who are white. This is a federally required assessment known as a “disparate impact analysis.” 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 (people of color) bearing a variance that is 20 percentage points greater (+20%) in comparison to non-minority (white) 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.” (September 23, 2015)</p> <p>Therefore, if the difference in the proportion of customers of color who will be affected by the proposed change compared to white customers is more than +20%, then the change will be considered to have a disparate impact.</p> <p>For example, if the rider survey data shows that 60% of the riders on a route are people of color and the remaining 40% are white, then the difference (60% minus 40%) is +20%, which meets the policy threshold of +20% to be considered a disparate impact. In another example, if 35% of riders are people of color and the remaining 65% are white, then the difference (35% minus 65%) is -30%, which is less than +20% and would therefore not be a disparate impact.</p> <p>The data source for the disparate impact analysis is the systemwide onboard customer surveys of 2,798 passengers conducted by the Pioneer Valley Planning Commission in 2015 (Hampden County routes) and 2016 (Hampshire County routes).</p>
<p>Disproportionate (Low-income) Impact Analysis</p>	<p>This section explains whether or not the proposed change would have adverse impacts on customers who have low incomes in comparison to those who do not have low incomes. This is a federally required assessment known as “disproportionate impact analysis.” The threshold for such this impact is established by the PVTA Advisory Board’s Disproportionate Impact</p>

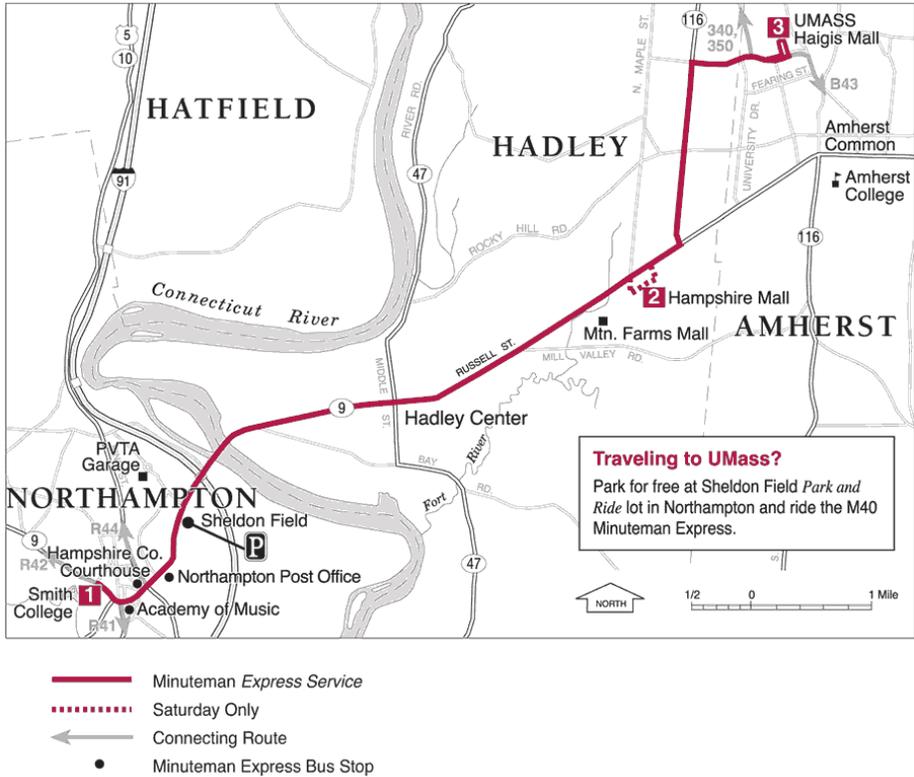
	<p>Policy: “If a PVTA planned transit fare rate, fare media or major service change results in low-income populations bearing a variance that is 20 percentage points greater (+20%) in comparison to those who are not low-income populations, the resulting effect will be considered a low-income disproportionate impact.” (September 23, 2015)</p> <p>For example, if 60% of the riders surveyed on a route are low-income (earning \$11,770/year or less), then the remaining 40% are considered not to be low-income, and the difference (60% minus 40%) is +20%. This meets the policy’s +20% threshold and would therefore be considered a disproportionate impact. In another example, if 35% of riders are low-income, then 65% are not low-income, and the difference (35% minus 65%) is -30%, which is less than the +20% policy threshold, and so would not be considered a disproportionate impact.</p> <p>The data source for the disproportionate impact analysis is the systemwide onboard customer surveys of 2,798 passengers conducted by the Pioneer Valley Planning Commission in 2015 (Hampden County routes) and 2016 (Hampshire County routes).</p>
<p>ADA Van Service Impact?</p>	<p>Explanation of whether or not there would be an impact to ADA van service area or hours because of the change to the hours or geographic coverage of the underlying fixed route on which the local ADA service is based.</p>
<p>Alternate Transit Service Available?</p>	<p>Description of alternate bus routes and transportation available to make trips in the corridor in which the proposed service change would occur.</p>
<p>Least Discriminatory Alternative</p>	<p>This section provides information on whether or not there is another alternative that could achieve the business purpose of the proposed change (in this case, balancing the PVTA FY2018 operating budget) that would be less discriminatory. This analysis is required by the PVTA Disparate and Disproportionate Impact Policies (adopted September 23, 2015, which state: “...in the event that the proposed service change would have an adverse impact that affects customers of color or those with low-incomes (defined as the federal poverty level) 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... and demonstrate that a legitimate business purpose cannot otherwise be accomplished and that the proposed change is the least discriminatory alternative.”</p>
<p>Mitigation and Revised Service Change</p>	<p>If the change would have either a disparate or disproportionate impact, mitigation must be proposed and implemented to lessen the effects on riders, as required by the PVTA Disparate and Disproportionate Impact Policies (adopted September 23, 2015) which state: “...PVTA must take measures to mitigate the impact of the proposed action on the affected minority population or low income population...”</p>

Option 1: M40 (Express)—Eliminate Route

<p>Route Description</p>	<p>The M40 is an express bus with 9 trips Mon-Fri every 60-75 min and 10 trips on Saturday every 60 min between Smith College in Northampton and Haigis Mall at UMass Amherst. The M40 schedule and stops are geared to assist students and staff traveling between the campuses of the above-mentioned institutions and was instituted in 2004 as a congestion mitigation strategy during reconstruction of the Coolidge Bridge on Route 9. It is funded in part by Five Colleges Incorporated. No fares are collected on board.</p> 
<p>Proposed Change and Rationale</p>	<p>This option eliminates Route M40. The M40 is an Express Class service with a performance standard of 20 passengers per trip. The M40 fails to meet this standard, carrying an average 12 passengers per trip on weekdays and 5 passengers per trip on Saturdays. The M40 operates only during the academic year. If the M40 is eliminated, customers would be able to make the same trips by using the B43 local service with an increase of approximately 5-15 minutes in travel time, as they already do when the M40 does not operate.</p>
<p>Communities Affected</p>	<p>Amherst, Hadley (Saturday only), Northampton</p>
<p>Effective Date</p>	<p>9/3/17</p>
<p>Major Service Change?</p>	<p>Yes. 100% of route miles would be eliminated on days that the service currently operates (Mon-Sat), which exceeds the major service change threshold of 25%.</p>
<p>Customers Affected?</p>	<p>90 customers estimated per weekday. 8 on Saturdays.</p>

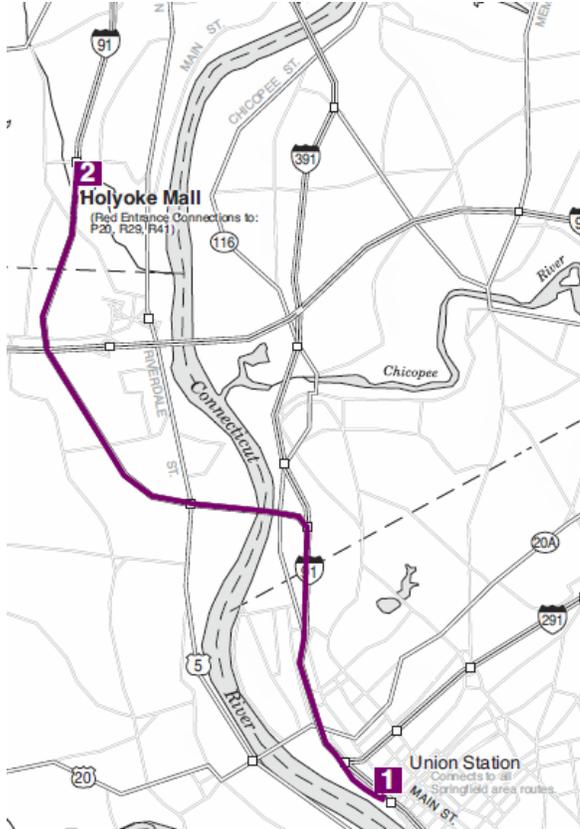
Disparate (racial discrimination) Impact?	NO DISPARATE IMPACT: 30% of route riders are people of color and 70% are white. The minority/non-minority difference is therefore -40%, which does not exceed the +20% policy threshold that is considered to be a disparate impact.
Disproportionate (low-income) Impact?	NO DISPROPORTIONATE IMPACT: 20% of route riders are considered “low-income” (defined as the federal poverty rate of \$11,770 per year for an individual), and the remaining 80% are not low-income. Therefore, the low-income/non-low-income difference is -60%, which does not exceed the +20% policy threshold that is considered to be a disproportionate impact.
ADA Van Service Impact?	NONE.
Alternate Transit Service Available?	YES. The same boarding and destinations stops are available during the same hours of service by using Route B43.
Least Discriminatory Alternative?	<p>YES. This is the least discriminatory cost-saving alternative in this travel corridor. It affects the smallest proportion and number of low-income riders and riders of color on the day of service.</p> <p>Reductions to the B43, which is the other principal PVTA route serving these destinations, would affect larger proportions of low-income riders (20% for M40 versus 56% for B43) and riders of color (30% for M40 versus 45% for B43). Also, because the B43 provides approximately 630,000 trips per year, versus 35,000 for the M40, approximately 15 to 20 times more riders of color and low-income would be affected by any change(s) to the B43.</p> <p>If additional funding becomes available, eliminating M40 Saturday service only has been evaluated (Option 2), which would generate less savings but would maintain the weekday M40 service. Another possible alternative considered as part of Option 1 would be to reduce the number of trips to 2 per day (1 in morning rush hour; 1 in the afternoon); however, it is not likely that limited service would yield any significant savings.</p>
Mitigation	<p>Mitigation is not required, as neither disparate nor disproportionate impacts are identified. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Replace M40 weekday service with 8 one-way express trips on the B43 (4 in morning peak to from Smith College to UMass; 4 in afternoon peak from UMass to Smith College). 2. Provide customer information on PVTA website, social media and other outlets prior to route reduction or elimination. Make special efforts to notify academic institutions so they may inform students and staff prior to the start of the Fall 2017 semester. 3. Post notices on buses and bus stops in the Amherst/Northampton areas to advise M40 passengers of this service change and the alternate B43 service that is available at the same times of day. 4. Perform ridership and service monitoring of the B43 alternative service to identify any impacts to on time performance and capacity.

Option 2: M40 (Express)—Eliminate Saturday Service

<p>Route Description</p>	<p>The M40 is an express bus with 9 trips Mon-Fri every 60-75 min and 10 trips on Saturday every 60 min between Smith College in Northampton and Haigis Mall at UMass Amherst. The M40 schedule and stops are geared to assist students and staff traveling between the campuses of the above-mentioned institutions and was instituted in 2004 as a congestion mitigation strategy during reconstruction of the Coolidge Bridge on Route 9. It is funded in part by Five Colleges Incorporated. No fares are collected on board.</p>  <p>Traveling to UMass? Park for free at Sheldon Field Park and Ride lot in Northampton and ride the M40 Minuteman Express.</p>
<p>Proposed Change and Rationale</p>	<p>This option eliminates Route M40 Saturday service only. The M40 is an Express Class service with a performance standard of 20 passengers per trip. The M40 fails to meet this standard on weekdays, carrying an average 12 passengers per trip on weekdays and 5 on Saturdays. The M40 operates only during the academic year. If the M40 is eliminated, customers would be able to make the same trips by using the B43 local with an increase of approximately 5-15 minutes in travel time (depending on traffic), as they already do when UMass is not in session.</p>
<p>Communities Affected</p>	<p>Amherst, Hadley (Saturday only stop at Walmart), Northampton</p>
<p>Effective Date</p>	<p>9/3/17</p>
<p>Major Service Change?</p>	<p>YES. 100% of route miles would be eliminated on day that the service operates (Sat), which exceeds the major service change threshold of 25%.</p>
<p>Customers Affected?</p>	<p>8 estimated on Saturdays</p>

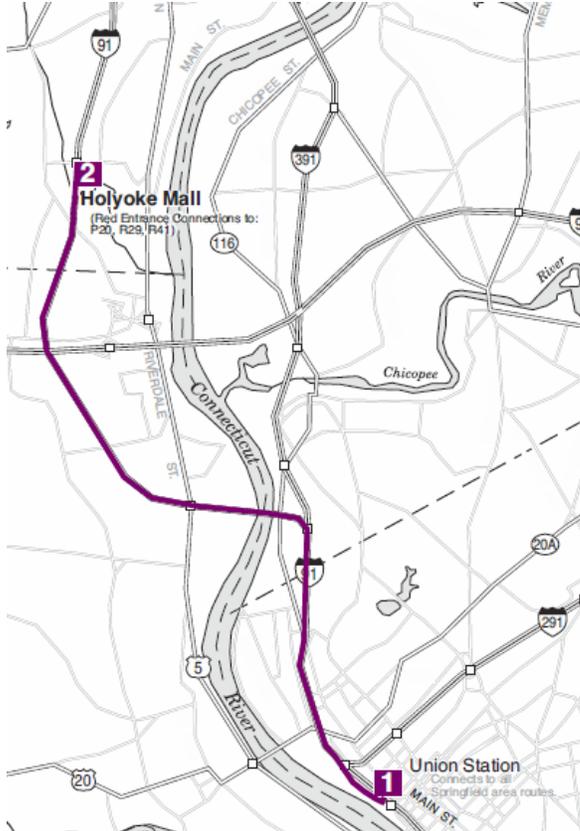
Disparate (racial discrimination) Impact?	NO DISPARATE IMPACT: 30% of route riders are people of color and 70% are white. The minority/non-minority difference is therefore -40%, which does not exceed the +20% policy threshold that is considered to be a disparate impact.
Disproportionate (low-income) Impact?	NO DISPROPORTIONATE IMPACT: 20% of route riders are considered “low-income” (defined in this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 80% are not low-income. Therefore, the low-income/non-low-income difference is -60%, which does not exceed the +20% policy threshold that is considered to be a disproportionate impact.
ADA Van Service Impact?	NONE.
Alternate Transit Service Available?	YES. The same boarding and destinations stops are available during the same hours of service by using Route B43.
Least Discriminatory Alternative?	<p>YES. This is the least discriminatory cost-saving alternative in this travel corridor. It affects the smallest proportion and number of low-income riders and riders of color on the day of service.</p> <p>Reductions to the B43, which is the other principal route serving these destinations, would affect larger proportions of low-income riders (20% for M40 versus 56% for B43) and riders of color (30% for M40 versus 45% for B43). Also, because the B43 provides approximately 630,000 trips per year, versus 35,000 for the M40, it’s likely that 15 to 20 times more riders would be affected by any change(s) to the B43.</p> <p>Another alternative considered as part of Option 2 (this option) would be to reduce the number of trips to 2 per day (1 in morning rush hour; 1 in the afternoon); however, because of the availability of labor and work schedules, it is not likely that this limited service would yield any significant savings.</p>
Mitigation	<p>Mitigation is not required, as neither disparate nor disproportionate impacts are likely. To minimize inconvenience to M40 Saturday riders, PVTA will:</p> <ol style="list-style-type: none"> 1. Post notices on buses and stops to advise M40 passengers that similar service is available via Route B43. 2. Provide customer education on PVTA website, social media and other outlets about the service reduction or elimination. 3. Perform ridership and service monitoring of the B43 on Saturday to observe any impacts to on time performance and capacity.

Option 3: P20E (Express)—Eliminate Route

<p>Route Description</p>	<p>The P20E is an express bus that operates 9 non-stop trips Mon-Fri every 60-120 min and 13 non-stop trips on Saturday every 60 min between the Holyoke Mall and Springfield Union Station. The majority of travel is via I-91.</p>  <p>The map displays the route of the P20E express bus service. It starts at Holyoke Mall (marked with a purple '2') and ends at Union Station (marked with a purple '1'). The route is highlighted in purple and follows I-91 north-south. Key streets shown include Main St, Chicopee St, Inverhale St, and Main St. The Chicopee River and Connecticut River are also visible. Text on the map notes: 'Holyoke Mall (Fixed Entrance Connections to: P20, R29, R41)' and 'Union Station (Connects to all Springfield area routes)'.</p>
<p>Proposed Change and Rationale</p>	<p>This option eliminates Route P20E. The P20E is an Express Class service with a performance standard of 20 passengers per trip. The P20E does not meet this standard, carrying an average 10 passengers per trip on weekdays. On Saturdays, there are an average 11 passengers per trip. If the P20E is eliminated, customers would be able to make the same trips by using the P20 local service with an increase of approximately 15 minutes in travel time (from 15 to 30 min), as they must already do on Sundays and during early morning and evening hours when the P20E does not operate.</p>
<p>Communities Affected</p>	<p>Holyoke, Springfield</p>
<p>Effective Date</p>	<p>8/27/17</p>
<p>Major Service Change?</p>	<p>YES. 100% of route miles would be eliminated on days that the service currently operates (Mon-Sat), which exceeds the major service change threshold of 25%.</p>
<p>Customers Affected?</p>	<p>84 customers estimated per weekday. 139 on Saturdays.</p>

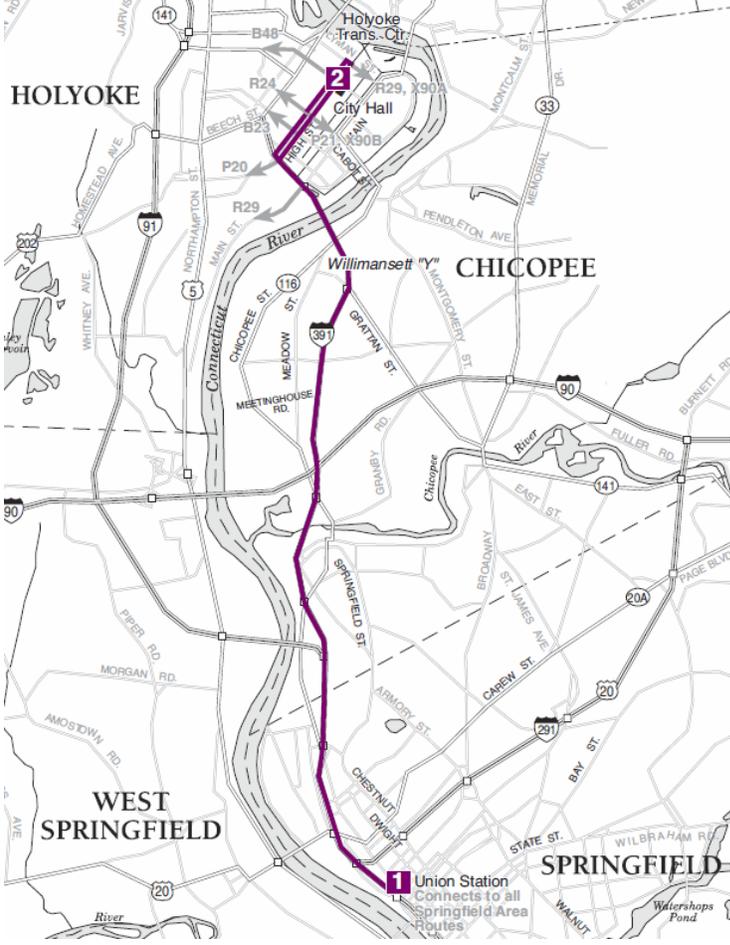
<p>Disparate (racial discrimination) Impact?</p>	<p>DISPARATE IMPACT LIKELY: 71% of riders of the underlying P20 local bus route are people of color, and the remaining 29% are white. The minority/non-minority difference is therefore +42%, which exceeds the +20% policy threshold that is considered to be a disparate impact.</p> <p>(Similar rider characteristics are assumed for riders the P20E as the P20 local, as it serves the same corridor and customer base; rider surveys of the P20E were not performed during the most recent customer survey cycle.)</p>
<p>Disproportionate (low-income) Impact?</p>	<p>NO DISPROPORTIONATE IMPACT: 49% of riders of the underlying P20 local bus route are considered “low-income” (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and so the remaining 51% are not low-income. Therefore, the low-income/non-low-income difference is -2%, which does not exceed the +20% policy threshold that is considered to be a disproportionate impact.</p> <p>(Similar rider characteristics are assumed for riders of the P20E as the P20 local, as it serves the same corridor and customer base; rider surveys of the P20E were not performed during the most recent customer survey cycle.)</p>
<p>ADA Van Service Impact?</p>	<p>NONE.</p>
<p>Alternate Transit Service Available?</p>	<p>YES. The same boarding and destinations stops are available during the same hours of service by using Route P20.</p>
<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory cost-saving alternative in this travel corridor. It affects the smallest proportion and number of low-income riders and riders of color on the day that this service operates.</p> <p>Service changes to the P20 local service, which carries 43-57 passengers per trip, would affect four to five times as many riders, thus greatly increasing the number who would experience a disproportionate (racially discriminatory) impact.</p>
<p>Mitigation</p>	<p>Mitigation is required, as a disparate impact is identified. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Evaluate Option 4 to retain Saturday service on the P20E (which carries more riders than the P20E weekday service). 2. Post notices on buses and bus stops to advise P20E passengers of the service elimination and the availability of alternate P20 service. 3. Provide customer education on the PVTA website, social media and other outlets of service elimination and alternate P20 service. 4. Distribute 7-day passes at no charge to former P20E customers (1 per customer). 5. Monitor P20 local service for on time performance and capacity impacts from additional ridership.

Option 4: P20E (Express)—Eliminate Saturday Service

<p>Route Description</p>	<p>The P20E is an express bus that operates 9 non-stop trips Mon-Fri every 60-120 min and 13 non-stop trips on Saturday every 60 min between the Holyoke Mall and Springfield Union Station. The majority of travel is via I-91.</p>  <p>The map displays the route of the P20E express bus service. It starts at Holyoke Mall (marked with a '2') and ends at Union Station (marked with a '1'). The route is highlighted in purple and follows I-91 northbound from Union Station to Holyoke Mall, then returns southbound via I-91 and Main Street. Key landmarks include the Chicopee River, Connecticut River, and various streets like Main St, Chicopee St, and Inverdale St. The map also shows other major roads like I-291, I-20A, and I-291.</p>
<p>Proposed Change and Rationale</p>	<p>This option proposes eliminating P20E Saturday service. The P20E is an Express Class service with a performance standard of 20 passengers per trip. The P20E does not meet this standard, carrying an average 10 passengers per trip on weekdays and 11 passengers per trip on Saturdays. If the P20E is eliminated, customers would be able to make the same trips by using the P20 local service with an increase of approximately 15 minutes in travel time (from 15 to 30 min), as they must already do on Sundays and during early morning and evening hours when the P20E does not operate.</p>
<p>Communities Affected</p>	<p>Holyoke, Springfield</p>
<p>Effective Date</p>	<p>8/27/17</p>
<p>Major Service Change?</p>	<p>YES. 100% of route miles would be eliminated on days the service operates (Saturday), which exceeds the major service change threshold of 25%.</p>
<p>Customers Affected?</p>	<p>139 estimated on Saturdays</p>

<p>Disparate (racial discrimination) Impact?</p>	<p>DISPARATE IMPACT LIKELY: 71% of riders of the underlying P20 local bus route are people of color, and the remaining 29% are white. The minority/non-minority difference is therefore +42%, which exceeds the +20% policy threshold that is considered to be a disparate impact.</p> <p><i>(Similar rider characteristics are assumed for riders the P20E as the P20 local, as it serves the same corridor and customer base; rider surveys of the P20E were not performed during the most recent customer survey cycle.)</i></p>
<p>Disproportionate (low-income) Impact?</p>	<p>NO DISPROPORTIONATE IMPACT: 49% of riders of the underlying P20 local bus route are considered “low-income” (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and so the remaining 51% are not low-income. Therefore, the low-income/non-low-income difference is -2%, which does not exceed the +20% policy threshold that is considered to be a disproportionate impact.</p> <p><i>(Similar rider characteristics are assumed for riders of the P20E as the P20 local, as it serves the same corridor and customer base; rider surveys of the P20E were not performed during the most recent customer survey cycle.)</i></p>
<p>ADA Van Service Impact?</p>	<p>NONE.</p>
<p>Alternate Transit Service Available?</p>	<p>YES. The same boarding and destinations stops are available during the same hours of service by using Route P20 local.</p>
<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory cost-saving alternative in this travel corridor. It affects the smallest proportion and number of low-income riders and riders of color on the day of service.</p> <p>Service changes to the P20 local Saturday service, which carries 43-57 passengers per trip, would affect four to five times as many riders, thus greatly increasing the number who would experience a disproportionate (racially discriminatory) impact.</p>
<p>Mitigation and Revised Service Change Proposal</p>	<p>Mitigation is required, as a disparate impact is identified. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Retain P20E Saturday service (make no change). 2. If P20E Saturday service is eliminated, provide customer education on the PVTA website, social media and other outlets that P20E Saturday service will be retained. 3. If P20E Saturday service is eliminated, distribute 1-day passes at no charge to former P20E riders on the first four Saturdays that this change would be in effect. 4. Monitor P20 local service and P20E express service on Saturdays for on time performance and capacity impacts.

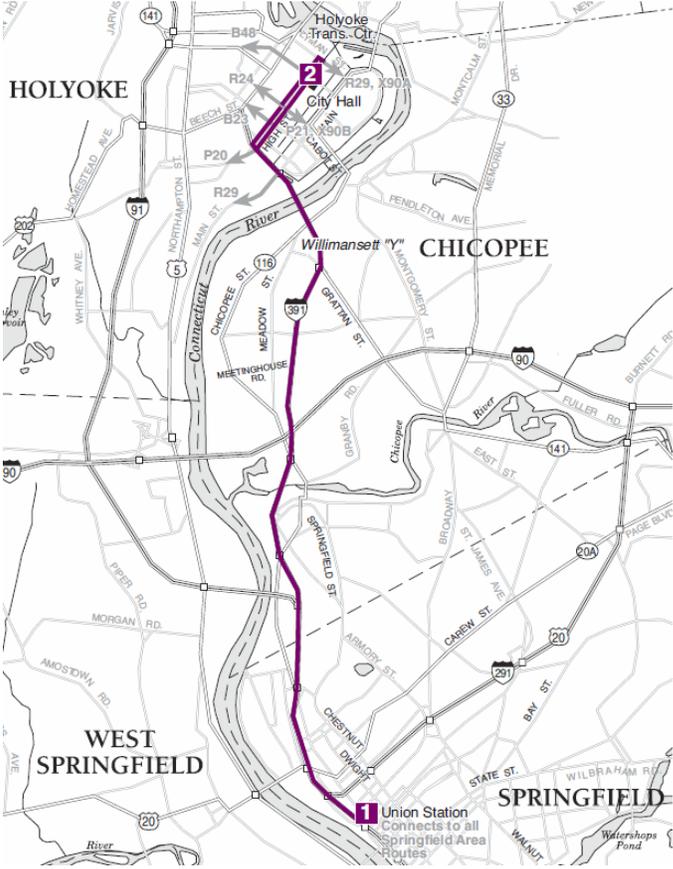
Option 5: P21E (Express)—Eliminate Route

<p>Route Description</p>	<p>The P21E is an Express Class service that operates between the Holyoke Transportation Center and Springfield Union Station. There are 14 non-stop trips Mon-Fri every 60 min; 10 trips on Saturdays; and 9 trips on Sundays. The majority of travel is via I-391. As of June 25, 2017, all-electric buses will be deployed exclusively on this route, which has fast charging stations for these vehicles at the terminals in Holyoke and Springfield.</p>  <p>The map displays the P21E Express route in purple, starting at Holyoke Trans. Ctr. (marked with a '2') and ending at Springfield Union Station (marked with a '1'). The route passes through Chicopee and West Springfield, following major roads like I-391 and I-91. Key locations labeled include Holyoke, Chicopee, West Springfield, and Springfield. The Connecticut River is also shown flowing through the area.</p>
<p>Proposed Change and Rationale</p>	<p>This option eliminates Route P21E. The P21E is an Express Class service with a performance standard of 20 passengers per trip. The P21E does not meet this standard, carrying an average 15 passengers per trip on weekdays. On Saturdays and Sundays, the P21E carries an average 8 passengers per trip. If the P21E is eliminated, customers will be able to make the same trips by using the P21 local service (via Chicopee) with an increase of approximately 30 minutes in travel time (from 15 to 45 min).</p>
<p>Communities Affected</p>	<p>Holyoke, Springfield</p>
<p>Effective Date</p>	<p>8/27/17</p>
<p>Major Service Change?</p>	<p>YES. 100% of route miles would be eliminated on service days (Mon-Sun), which exceeds the major service change threshold of 25%.</p>

Customers Affected?	146 customers estimated per weekday. 80 on Saturdays and Sundays.
Disparate (racial discrimination) Impact?	<p>LIKELY DISPARATE IMPACT: 86% of riders of the underlying P21 local bus route are people of color, and the remaining 14% are white. The minority/non-minority difference is therefore +72%, which exceeds the +20% policy threshold that is considered to be a disparate impact.</p> <p><i>(Similar rider characteristics are assumed for the P21E, as it serves the same corridor and customer base; rider surveys of the P21E were not performed during the most recent customer survey cycle.)</i></p>
Disproportionate (low-income) Impact?	<p>LIKELY DISPROPORTIONATE IMPACT: 60% of riders of the underlying P21 local bus route are considered “low-income” (defined in this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 40% are not low-income. Therefore, the low-income/not-low-income difference is +20%, which meets the +20% policy threshold that is considered to be a disproportionate impact.</p> <p><i>(Similar characteristics are assumed for riders of the P21E, as it serves the same corridor and customer base; rider surveys of the P21E were not performed during the most recent customer survey cycle.)</i></p>
ADA Van Service Impact?	NONE.
Alternate Transit Service Available?	YES. The same boarding and destinations stops are available during the same hours of service by using Route P21 local.
Least Discriminatory Alternative?	<p>YES. This is the least discriminatory cost-saving alternative in this travel corridor. It affects the smallest proportion and number of low-income riders and riders of color on the day of service.</p> <p>Service changes to the P21 local service, which carries 20-25 passengers per trip, would affect twice as many riders in total, as well as the number who would experience both disproportionate (racially discriminatory) and disparate (low-income discrimination) impacts.</p>
Mitigation	<p>Mitigation is required, as both disparate and disproportionate impacts are identified. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. PVTA has worked with the Pioneer Valley Metropolitan Planning Organization (PVMPO) to apply for a \$500,000 grant from the FHWA Congestion Mitigation and Air Quality program to operate the P21E for one year. To be eligible for these funds, 9 stop pairs will be added to the P21E in downtown Springfield at Bay State Medical Center and along local streets to Union Station so the P21E will qualify as an eligible “new service.” This grant request was approved by the PVMPO on May 23, 2017. The application was submitted to MassDOT on June 27 for CMAQ consultation process, and a final decision is expected July 14, 2017. 2. Evaluate Option 6 (eliminating P21E weekend service only) in the event the CMAQ grant is not approved and enough other funds become available to maintain weekday service.

	<ul style="list-style-type: none">3. If the CMAQ grant is not approved and this route is eliminated, post notices on buses and at bus stops to advise P21E passengers of the end of service and the availability of alternate P21 local service.4. If this route is eliminated, provide customer education on PVTA website, social media and other outlets prior to elimination.5. If this route is eliminated, distribute one 7-day pass at no charge to former P21E riders to encourage use of the P21 local.5. If this route is eliminated, monitor P21 local service for on time performance and capacity impacts from additional ridership.
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Option 6: P21E (Express)—Eliminate Saturday and Sunday Service

<p>Route Description</p>	<p>The P21E is an Express Class service that operates between the Holyoke Transportation Center and Springfield Union Station. There are 14 non-stop trips Mon-Fri every 60 min; 10 trips on Saturdays; and 9 trips on Sundays. The majority of travel is via I-391. As of June 25, 2017, all-electric buses will be deployed exclusively on this route, which has fast charging stations for these vehicles at the terminals in Holyoke and Springfield.</p>  <p>The map displays the P21E Express route in purple, starting at the Holyoke Transportation Center (marked with a purple '2') and ending at Springfield Union Station (marked with a purple '1'). The route follows I-391 through Holyoke, Chicopee, and West Springfield. Key locations labeled include Holyoke, Chicopee, West Springfield, and Springfield. Major roads like I-91, I-391, and I-20A are shown. The Connecticut River is also depicted.</p>
<p>Proposed Change and Rationale</p>	<p>This option eliminates P21E Saturday and Sunday service. The P21E is an Express Class service with a performance standard of 20 passengers per trip. The P21E does not meet this standard on Saturdays and Sundays, when it carries an average 8 passengers per trip. If the P21E is eliminated, customers would be able to make the same trips by using the P21 local service (via Chicopee) with an increase of approximately 30 minutes in travel time (from 15 to 45 min).</p>
<p>Communities Affected</p>	<p>Holyoke, Springfield</p>
<p>Effective Date</p>	<p>8/27/17</p>
<p>Major Service Change?</p>	<p>Yes. 100% of route miles would be eliminated on days that the service currently operates (Sat-Sun), which exceeds the major service change threshold of 25%.</p>
<p>Customers Affected?</p>	<p>80 customers estimated per day on Saturdays and Sundays.</p>

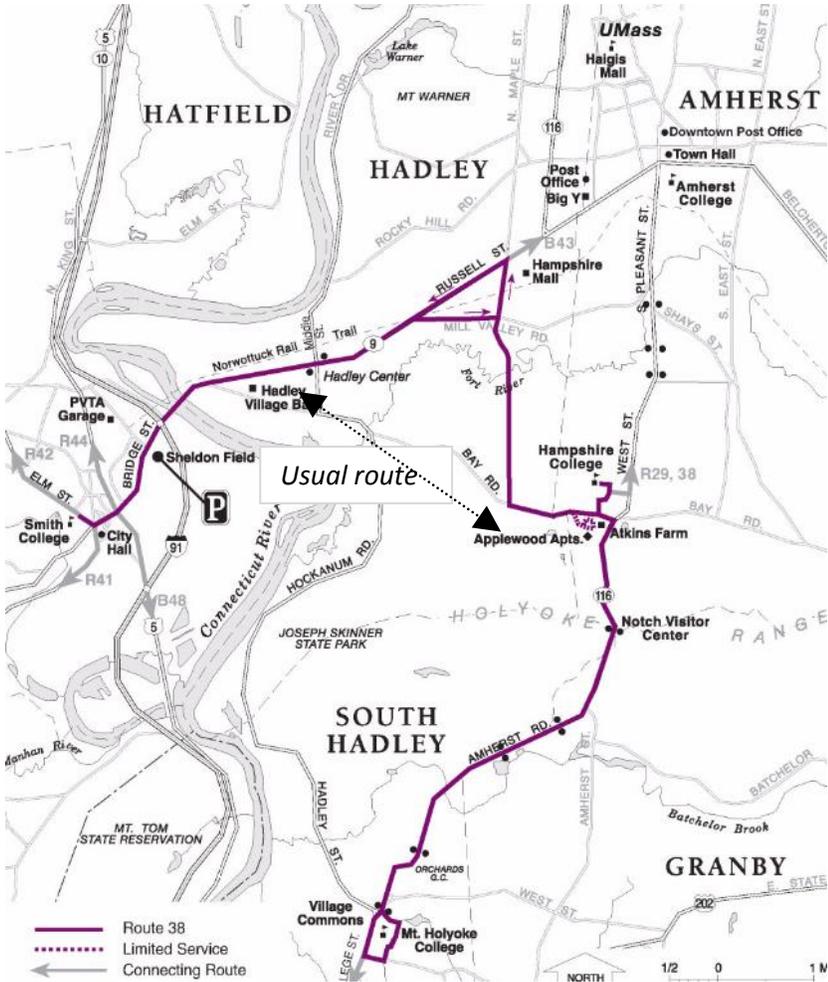
<p>Disparate (racial discrimination) Impact?</p>	<p>LIKELY DISPARATE IMPACT: 86% of riders of the underlying P21 local bus route are people of color, and the remaining 14% are white. The minority/non-minority difference is therefore +72%, which exceeds the +20% policy threshold that is considered to be a disparate impact.</p> <p><i>(Similar rider characteristics are assumed for the P21E, as it serves the same corridor and customer base; rider surveys of the P21E were not performed during the most recent customer survey cycle.)</i></p>
<p>Disproportionate (low-income) Impact?</p>	<p>LIKELY DISPROPORTIONATE IMPACT: 60% of riders of the underlying P21 local bus route are considered “low-income” (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 40% are not low-income. Therefore, the low-income/non-low-income difference is +20%, which meets the +20% policy threshold that is considered to be a disproportionate impact.</p> <p><i>(Similar characteristics are assumed for riders of the P21E, as it serves the same corridor and customer base; rider surveys of the P21E were not performed during the most recent customer survey cycle.)</i></p>
<p>ADA Van Service Impact?</p>	<p>NONE.</p>
<p>Alternate Transit Service Available?</p>	<p>YES. The same boarding and destinations stops are available during the same hours of service by using Route P21 local.</p>
<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory cost-saving alternative in this travel corridor. It affects the smallest proportion and number of low-income riders and riders of color on the day of service.</p> <p>Service changes to the P21 local service were also considered. However, this route carries 38-45 passengers per trip, and so reductions would affect two to three times as many riders, thus increasing the total number of people who would experience both disproportionate (racially discriminatory) and disparate (low-income discrimination) impacts.</p>
<p>Mitigation and Revised Service Change</p>	<p>Mitigation is required, as both disparate and disproportionate impacts are identified. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Pursue a \$500,000 one-year grant from the FHWA Congestion Mitigation and Air Quality program to operate the P21E for one year (see Option 5 mitigation measure #1). 2. If this route is eliminated, post notices on buses and bus stops to advise P21E passengers of alternate P21 local service. 3. If this route is eliminated, provide customer information on PVTA website, social media and other outlets prior to route elimination. 4. If this route is eliminated, distribute 7-day passes at no cost to former P21E weekend riders to encourage use of the P21 local. 5. Monitor P21 local service for on time performance and capacity impacts from additional ridership.

Option 7: Route 39—Eliminate Route

Route Description

Route 39 operates between Mount Holyoke College in South Hadley, Hampshire College in Amherst, and Smith College in Northampton. There are 24 trips a day Mon-Fri every 30-90 min; 13 trips a day on Saturdays every 75-120 min; and 9 trips a day on Sundays every 75-120 min. Late night service operates up to 2:00AM on Friday and Saturday nights. A reduced service schedule of 8 to 10 trips per day operates during the academic winter break, and there is no service during the summer.

Route 39 travels primarily via Bay Road, with relatively few stops. (NOTE: A significant detour that required Route 39 buses to run via South Maple Street and Route 9 in Hadley has been in effect since early 2016 due to bridge reconstruction on Bay Road at Route 47, as shown below. This construction is due to be completed in September or October 2017, which will allow Route 39 buses to resume their usual route and schedule.) Route 39 is geared to assist students traveling between the campuses of the above-mentioned institutions when they are in session and is funded in part by Five Colleges Incorporated. No fares are collected on board.



Proposed Change and Rationale	This option eliminates Route 39. The 39 is a Campus Service class service with a performance standard of 20 passengers per revenue hour. Route 39 does not meet this standard, carrying 7-10 passengers per revenue hour on weekdays. On Saturdays, Route 39 averages 9 passengers per trip, and on some early trips buses are empty. For reference, the average weekday performance for all Campus Service routes is 50-55 passengers per revenue hour on weekdays, and 35-51 on weekends. There is alternate service available (Routes 38 or R29 to Route B43) to reach all of the destinations served by Route 39 (except those in Hadley), albeit with longer travel times.
Communities Affected	Amherst, Northampton, South Hadley, Hadley (1 stop at Routes 9 and 47)
Effective Date	9/3/17
Major Service Change?	YES. 100% of route miles would be eliminated on days that the service currently operates (Mon-Sun), which exceeds the major service change threshold of 25%.
Customers Affected?	96 customers estimated per weekday. 105 on Saturdays and Sundays.
Disparate (racial discrimination) Impact?	NO DISPARATE IMPACT: 46% of riders of Route 39 are people of color, and the remaining 54% are white. The minority/non-minority difference is therefore -8%, which is less than the +20% policy threshold that is considered to be a disparate impact.
Disproportionate (low-income) Impact?	LIKELY DISPROPORTIONATE IMPACT: 86% of riders of Route 39 are considered "low-income" (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 14% do not have low incomes. Therefore, the low-income/non-low-income difference is +72%, which exceeds the +20% policy threshold that is considered to be a disproportionate impact.
ADA Van Service Impact?	NONE.
Alternate Transit Service Available?	<p>YES. On weekdays, Five Colleges Incorporated operates 22 trips per day among these campuses using 12-passenger vans run by local contractor Seemo Shuttle. No fare is charged onboard. The Seemo Shuttle schedule is included on the following page. It is assumed this service will continue to be available on weekdays.</p> <p>In addition, riders can make the same trips Mon-Sun from Mount Holyoke and Hampshire Colleges to Smith College by taking Route 38 to UMass Haigis Mall or downtown Amherst and transferring to the B43 to Smith College. Travel time would increase from 30 min to approximately 70 min.</p>

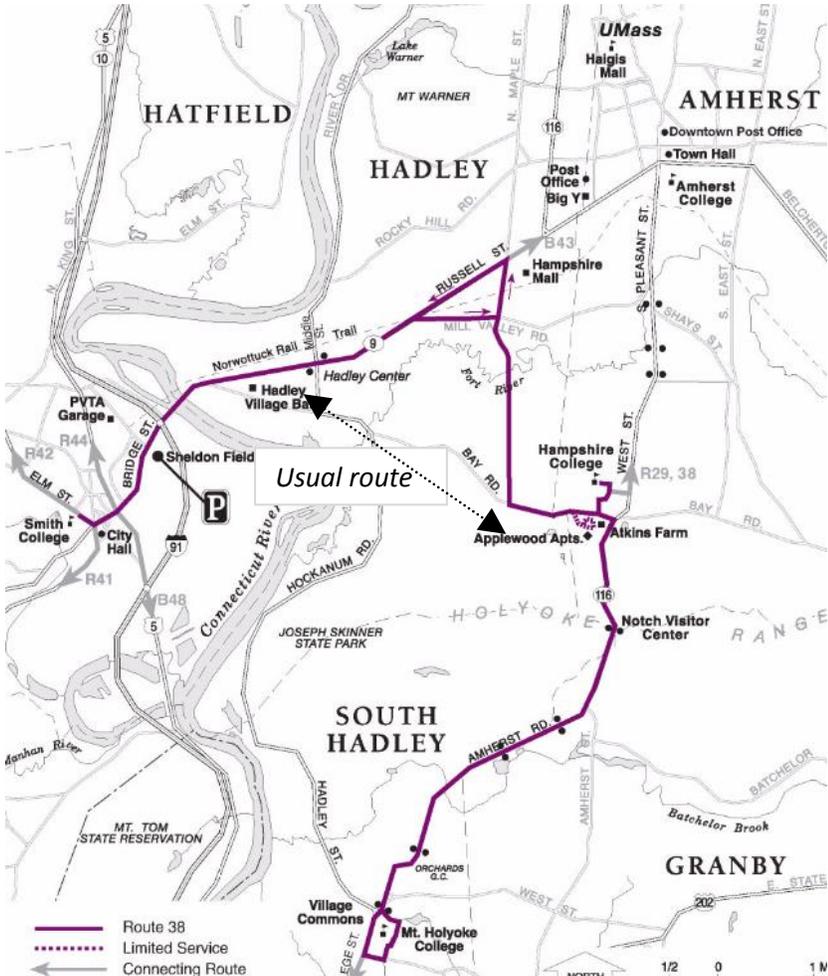
<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory cost-saving alternative in this travel corridor (between Mt Holyoke, Hampshire, and Smith Colleges). It affects the smallest proportion and number of low-income riders and riders of color.</p> <p>PVTA also considered service changes to Route 38, which would also have disproportionate impacts, but they would affect an even greater of low-income riders because Route 38 carries four times as many passenger trips (288,000) per year as Route 39 (72,000) with similar income characteristics.</p> <p>Service changes to Route 43 were also considered and would not trigger disparate or disproportionate impacts, but would affect a larger proportion of riders of color (56% for B43 versus 46% for Route 39), as well as a greater total number of riders.</p> <p>Finally, service changes to Route 29 were considered but would pose a disparate (racial discrimination) impact because 69% of its riders are people of color, versus 46% for Route 39. Route 29 would also have a disproportionate (low-income discrimination) impact, though the severity of it would be reduces somewhat, from 86% on Route 39 to 70% on Route 29.</p>
<p>Mitigation and Revised Service Change Proposal</p>	<p>Mitigation is required, as a disproportionate impact is identified. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Continue to operate Route 39 and work with Five College institutions to identify future operating funds.

Inter-campus Seemo Shuttle Service Operated by Five Colleges Incorporated

MOUNT HOLYOKE COLLEGE TO/FROM SMITH COLLEGE

Buses from Mount Holyoke College to Smith College					Buses from Smith College to Mount Holyoke College				
Bus	Leave MHC	Arrive SC	SC classes MWF	SC classes TuTh	Bus	Leave SC	Arrive MHC	MHC classes MWF	MHC classes TuTh
38/39	7:05 AM	7:45 AM	8:00–8:50 AM, 8:30–9:50 AM	8:00–8:50 AM	Seemo	6:50 AM	7:20 AM		
Seemo	7:20 AM	7:50 AM	8:00–8:50 AM, 8:30–9:50 AM	8:00–8:50 AM	Seemo	7:50 AM	8:20 AM	8:35–9:50 AM	8:35–9:50 AM
Seemo	8:20 AM	8:50 AM	9:00–9:50 AM, 10:00–10:50 AM	9:00–10:20 AM	39/38	7:55 AM	8:50 AM	9:00–9:50 AM	9:00–9:50 AM
Seemo	9:25 AM	9:55 AM	10:00–10:50 AM	10:30–11:50 AM	Seemo	8:55 AM	9:25 AM	10:00–10:50 AM	10:00–10:50 AM, 10:00–11:15 AM
Seemo	10:25 AM	10:55 AM	11:00 AM–12:10 PM		Seemo	9:55 AM	10:25 AM	11:00–11:50 AM and –12:15 PM	11:30–12:45
Seemo	12:00 PM	12:30 PM	1:10–2:30 PM	1:00–2:50 PM	Seemo	10:55 AM	11:25 AM	12:20–1:10 PM	11:30 AM–12:45 PM
Seemo	1:05 PM	1:35 PM	2:40–4:20 PM	3:00–4:50 PM	39/38	10:50 AM	11:50 AM		
38/39	2:35 PM	4:00 PM			Seemo	12:35 PM	1:05 PM	1:15–2:05 PM	1:15–2:30 PM
Seemo	2:10 PM	2:40 PM			Seemo	1:35 PM	2:05 PM	2:40–3:55 PM	2:40–3:55 PM
Seemo	3:10 PM	3:40 PM			Seemo	2:40 PM	3:10 PM		3:15–4:05 PM
38/39	4:05 PM	4:50 PM			39/38	2:50 PM	4:20 PM		
Seemo	4:10 PM	4:50 PM			Seemo	3:40 PM	4:10 PM	4:15–5:05 PM	
Seemo	5:20 PM	5:50 PM			Seemo	4:45 PM	5:20 PM		6:00–7:30 PM
Seemo	6:30 PM	7:00 PM	7:30–8:20 PM, 7:30–9:30 PM	7:30–8:20 PM, 7:30–9:30 PM	Seemo	5:55 PM	6:30 PM		
39	8:45 PM	9:30 PM			39/38	6:15 PM	7:20 PM		
39	10:25 PM	11:10 PM			39/38	6:45 PM	8:10 PM		
39 (Friday only)	12:00 AM	12:40 AM			39	7:55 PM	8:45 PM		
					39	9:35 PM	10:25 PM		
					39	11:15 PM	12:00 AM		
					39 (Friday only)	11:15 PM	12:00 AM		
					39 (Friday only)	12:45 AM	1:30 AM		

Option 8: Route 39—Eliminate Saturday and Sunday Service

<p>Route Description</p>	<p>Route 39 operates between Mount Holyoke College in South Hadley, Hampshire College in Amherst, and Smith College in Northampton. There are 24 trips a day Mon-Fri every 30-90 min; 13 trips a day on Saturdays every 75-120 min; and 9 trips a day on Sundays every 75-120 min. Late night service operates up to 2:00AM on Friday and Saturday nights. A reduced service schedule of 8 to 10 trips per day operates during the academic winter break, and there is no service during the summer.</p> <p>Route 39 travels primarily via Bay Road, with relatively few stops. (NOTE: A significant detour that required Route 39 buses to run via South Maple Street and Route 9 in Hadley has been in effect since early 2016 due to bridge reconstruction on Bay Road at Route 47, as shown below. This construction is due to be completed in September or October 2017, which will allow Route 39 buses to resume their usual route and schedule.)</p> <p>Route 39 is geared to assist students traveling between the campuses of the above-mentioned institutions when they are in session and is funded in part by Five Colleges Incorporated. No fares are collected on board.</p>  <p>The map illustrates the route of Route 39 through the region. The 'Usual route' is shown as a solid purple line, starting from Mt. Holyoke College in South Hadley, heading north through Amherst, and ending at Smith College in Northampton. A 'Limited Service' route is shown as a dotted purple line, which detours from the usual route in Hadley, using South Maple Street and Route 9. Key locations marked include Hatfield, Amherst, South Hadley, and Granby. Landmarks such as UMass, Hampshire College, and Smith College are also indicated. The map includes a legend for route types and a scale bar.</p>
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Proposed Change and Rationale	This option eliminates weekend service on Route 39, which has 13 roundtrips on Saturdays and 10 on Sundays. The 39 is a Campus Service class service with a performance standard of 20 passengers per revenue hour. Route 39 does not meet this standard on Saturdays, when it averages 9 passengers per trip, with some runs empty. For reference, the average performance for all routes in the Campus Services class on weekends is 35 to 51 passengers per trip. Also, alternate transit service is available on Saturdays (Route 38 to Route B43) that goes to all the destinations served by Route 39, albeit with longer travel times.
Communities Affected	Amherst, Northampton, South Hadley, Hadley (1 stop at Routes 9 and 47)
Effective Date	9/3/17
Major Service Change?	YES. 100% of route miles would be eliminated on days that the service currently operates (Mon-Sun), which exceeds the major service change threshold of 25%.
Customers Affected?	96 customers estimated per weekday. 105 on Saturdays and Sundays.
Disparate (racial discrimination) Impact?	NO DISPARATE IMPACT: 46% of riders of Route 39 are people of color, and the remaining 54% are white. The minority/non-minority difference is therefore -8%, which is less than the +20% policy threshold that is considered to be a disparate impact.
Disproportionate (low-income) Impact?	LIKELY DISPROPORTIONATE IMPACT: 86% of riders of Route 39 are considered "low-income" (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 14% do not have low incomes. Therefore, the low-income/non-low-income difference is +72%, which exceeds the +20% policy threshold that is considered to be a disproportionate impact.
ADA Van Service Impact?	NONE.
Alternate Transit Service Available?	YES. Riders can also make the same trips Mon-Sun from Mount Holyoke and Hampshire Colleges to Smith College by taking Route 38 to UMass Haigis Mall or downtown Amherst and transferring to the B43 to Smith College. Travel time would increase from 30 min to approximately 70 min. Also, for riders who are able to shift their Saturday trips to a weekday, Five Colleges Incorporated operates 22 trips per day Mon-Fri among these campuses using 12-passenger vans run by local contractor Seemo Shuttle at no cost to riders (see schedule accompanying Option 7 on page 35).

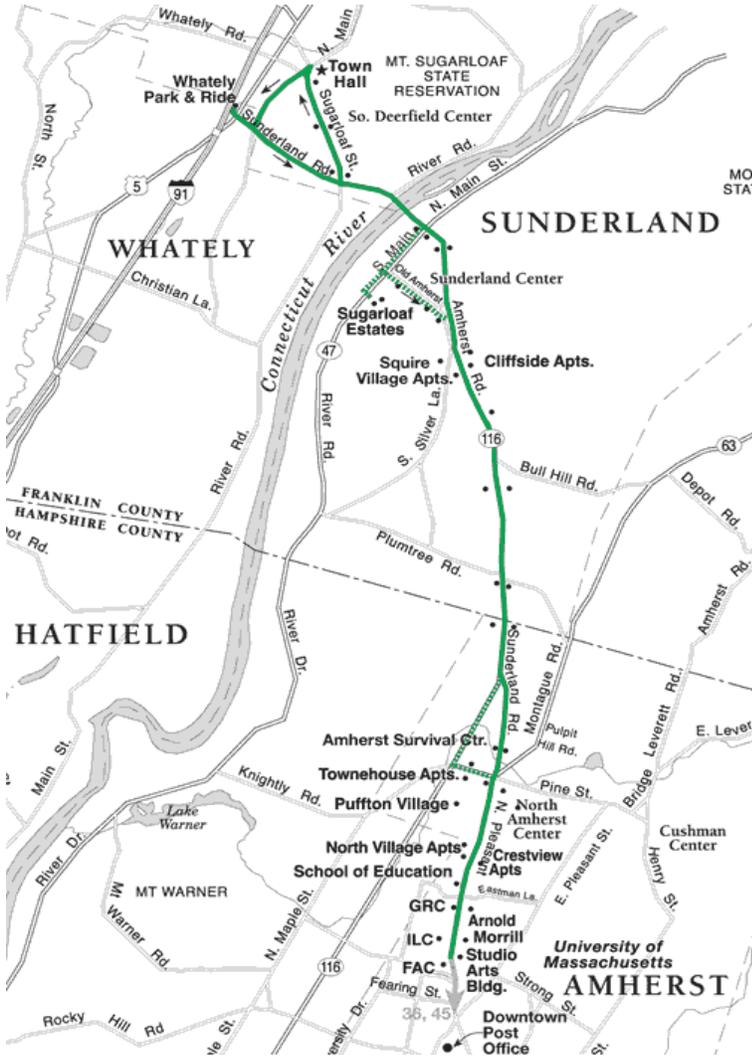
<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory cost-saving alternative in this travel corridor (between Mt Holyoke, Hampshire, and Smith Colleges). It affects the smallest proportion and number of low-income riders and riders of color.</p> <p>PVTA initially evaluated service changes to Route 38; however, those would also have disproportionate impacts that would affect an even greater of low-income riders because Route 38 carries four times as many trips (288,000) per year as Route 39 (72,000) but with similar income characteristics.</p> <p>Service changes to Route 43 were also considered, as they would not trigger disparate or disproportionate impacts, but would affect a larger proportion of riders of color (56% for B43 versus 46% for Route 39).</p> <p>Service changes to Route 29 were considered, but would pose a disparate (racial discrimination) impact because 69% of its riders are people of color, versus 46% for Route 39. Route 29 would also have a disproportionate (low-income discrimination) impact, though the severity of it would be reduces somewhat, from 86% on Route 39 to 70% on Route 29.</p>
<p>Mitigation and Revised Service Change Proposal</p>	<p>Mitigation is required, as a disproportionate impact is identified. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Continue to operate Route 39 (as proposed in mitigation item #1 for Option 7 on page 34) and work with Five College institutions to identify future operating funds.

Option 9: Route 46—Eliminate Route

Route Description

Route 46 is a Campus Service class service that operates 6 roundtrips per day Mon-Fri (3 in the morning, 1 midday, 2 in late afternoon) from the UMass Amherst Campus north to Sunderland, Sugarloaf Street and South Deerfield Center, and the Whately Park and Ride at I-91 and Sunderland Road. The majority of travel is via Route 116.

Route 46 is designed to aid students and staff of UMass in commuting to campus, and is funded in part by UMass. No fares are collected on board. Route 46 also operates during the non-academic summer months, when ridership is significantly less.

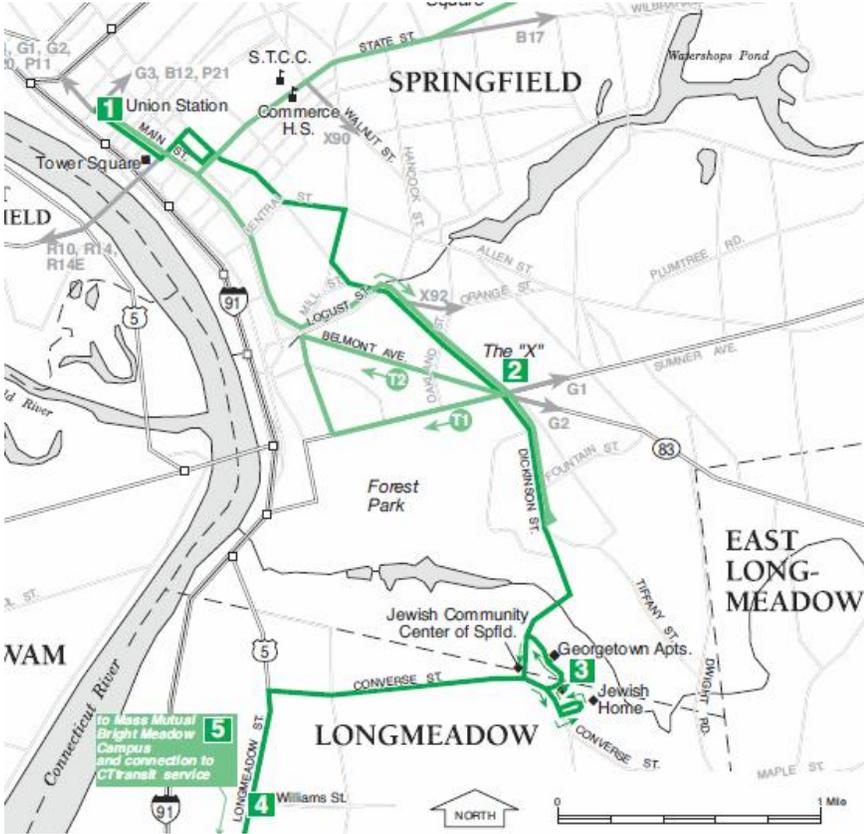


<p>Proposed Change and Rationale</p>	<p>This option eliminates Route 46, a total of 6 roundtrips on weekdays. As a Campus Service class service, the performance standard for Route 46 is 20 passengers per revenue hour. However, Route 46 does not meet this standard along the majority of its route. Ridership is very low on the route segments in Sunderland, South Deerfield, and Whately. There are typically no more than 6 customers per day north of Sunderland, and 15-20 per day within Sunderland. Only when the Route 46 bus enters north Amherst and begins to pick up large numbers of students at Townhouse Apartments and other large student apartment complexes does the route reach the 20 PPRH threshold, carrying 21 to 31 PPRH depending on the time of the school year. During the non-academic summer months, overall route performance drops to 16-17PPRH for the entire route, and ridership north of the Amherst town line is very low.</p> <p>Also significant is the fact that Route 46 operates in two municipalities (South Deerfield and Whately) that are not PVTA member communities. As such, these two towns do not pay assessments to PVTA for the service they receive (based on route miles), and so the 24 PVTA member municipalities are effectively subsidizing fixed route and paratransit service in Whately and South Deerfield. This is an inequity for PVTA member communities, as well as riders from South Deerfield and Whately, who have no representation on the PVTA Advisory Board.</p>
<p>Communities Affected</p>	<p>Amherst, Sunderland, South Deerfield (not a PVTA community), Whately (not a PVTA community)</p>
<p>Effective Date</p>	<p>9/3/17</p>
<p>Major Service Change?</p>	<p>YES. 100% of route miles would be eliminated on days that the service currently operates (Mon-Fri), which exceeds the major service change threshold of 25%. However, approximately 30% of route miles would be added back in as part of proposed mitigation (below).</p>
<p>Customers Affected?</p>	<p>6 customers estimated per weekday in South Deerfield and Whately (12% of route ridership). 15-19 per weekday in Sunderland (36% of route ridership). 23-28 in North Amherst (53% of route ridership, but would be mitigated by proposed tripper service—see below).</p>
<p>Disparate (racial discrimination) Impact?</p>	<p>NO DISPARATE IMPACT: 20% of riders of Route 46 are people of color, and the remaining 80% are white. The minority/non-minority difference is therefore -60%, which is less than the +20% policy threshold that is considered to be a disparate impact.</p>
<p>Disproportionate (low-income) Impact?</p>	<p>NO DISPROPORTIONATE IMPACT: 32% of riders of Route 46 are considered “low-income” (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 68% do not have low incomes. Therefore, the low-income/non-low-income difference is -36%, which is less than the +20% policy threshold that is considered to be a disproportionate impact.</p>

<p>ADA Van Service Impact?</p>	<p>PARTIAL.</p> <p>In Amherst: No change.</p> <p>In Sunderland: No change.</p> <p>In South Deerfield and Whately: The elimination of the underlying fixed route would require that the ¾-mile buffer be re-calculated from the nearest point of PVTA Route 31 in Sunderland. This would reduce ADA coverage in South Deerfield and eliminate coverage in Whately.</p>
<p>Alternate Transit Service Available?</p>	<p>PARTIAL. For trips between Sunderland and the UMass campus, identical service is available on Route 31.</p> <p>For trips to/from Whately Park and Ride, riders can take FRTA Route 31 to Northampton Academy of Music and transfer to PVTA Route B43 to UMass.</p> <p>For travelers starting/ending their trips along Sugarloaf Street and South Deerfield Center, there is no alternative transit immediately available; customers would need to walk, bike, or get a ride to Sunderland Center to take Route 31.</p>
<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory cost-saving alternative in this travel corridor. It affects the smallest proportion of low-income riders and riders of color on the day of service.</p> <p>In this corridor, PVTA also considered the possibility of reducing service frequencies on Route 31 to achieve savings. However, the proportion and numbers of low-income riders and riders of color using Route 31 is substantially larger than Route 46, and would therefore be more discriminatory.</p>
<p>Mitigation and Revised Service Change Proposal</p>	<p>Mitigation is not required, as neither disparate nor disproportionate impacts were identified. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Retain 4 round trips per weekday (2 in morning peak; 2 in afternoon peak). Retention of fixed route service to South Deerfield and Whately will mean there will be no change to ADA service within the ¾ mile buffer in those municipalities. 2. Post notices on buses and bus stops to advise Route 46 customers of the service change. 3. Provide customer information on PVTA website, social media and other outlets about service elimination. 4. Work with Franklin Region Transit Authority to evaluate restoring FRTA Route 23 to Sunderland via South Deerfield for transfers to Route 31.

Option 10: Route G5—Eliminate Route

Route G5 is an Urban Radial service that operates 17 roundtrips per day Mon-Fri every 60-75 minutes and on 8 trips on Saturdays every 60-90 minutes from Springfield Union Station to the Mass Mutual Bright Meadow campus in Enfield, Connecticut via The X and Dickinson Street in Springfield and Converse and Longmeadow Streets in Longmeadow. A connection to CT Transit buses can be made in Enfield.



Proposed Change and Rationale

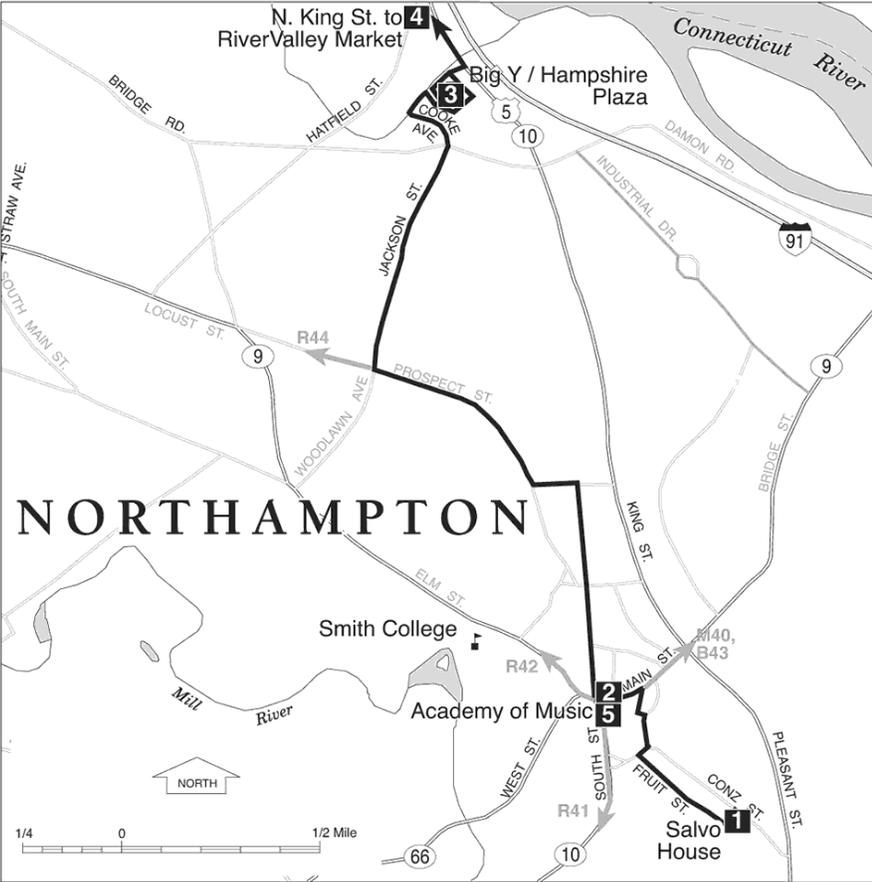
This option eliminates the 4.7-mile segment of Route G5 south of the Jewish Home at 1146 Dickinson Street in Springfield. As an Urban Radial class service, the performance standard for Route G5 is 20 passengers per revenue hour. However, Route G5 does not meet this standard in Longmeadow and Enfield CT. Ridership is very low in these communities; there are typically no more than 12 customers per day (about 1.5 per trip, and even fewer per revenue hour) south of the Jewish Home. Only after the route enters southern Springfield and begins picking up riders at Georgetown Condominiums, businesses, and residential areas along Dickinson Street, and eventually The X, does the G5 exceed 20 PPRH, ranging from 15 to 27 PPRH.

Also, Route G5 operates for .5 miles in Enfield CT, which is not a PVTA community. As such, Enfield does not pay assessments for the service it receives (based on route miles), and so the 24 PVTA municipalities are subsidizing Enfield’s fixed route and paratransit service. This is an inequity for PVTA members, as well as riders from Enfield, who have no representative on the PVTA Advisory Board.

Communities Affected	Springfield, Longmeadow, Enfield CT (not a PVTA community)
Effective Date	8/27/17
Major Service Change?	YES. 51% of route miles would be eliminated (4.7 of 9.0 total miles) on days that the service currently operates (Mon-Fri), which exceeds the major service change threshold of 25%.
Customers Affected?	12 customers estimated per weekday (south of Jewish Home).
Disparate (racial discrimination) Impact?	DISPARATE IMPACT LIKELY: 75% of riders of Route G5 are people of color, and the remaining 25% are white. The minority/non-minority difference is therefore +50%, which exceeds the +20% policy threshold that is considered to be a disparate impact.
Disproportionate (low-income) Impact?	NO DISPROPORTIONATE IMPACT: 48% of riders of Route G5 are considered "low-income" (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 52% do not have low incomes. Therefore, the low-income/non-low-income difference is -4%, which is less than the +20% policy threshold that is considered to be a disproportionate impact.
ADA Van Service Impact?	PARTIAL. In Springfield: No impact. In Longmeadow: No impact (ADA service will continue to be provided to the entire geographic area of the town, as required by PVTA's ADA policy). In Enfield CT: PVTA currently provides ADA van service within the federally required ¼ mi buffer from its fixed bus route. When the Enfield and Longmeadow segments of this route are eliminated, there will no longer be a ¼ mi buffer that extends into Enfield, and so PVTA's ADA service will cease in that municipality. However, CT Transit will continue to provide ADA van service with a ¼ mi buffer of its fixed routes (#905 and #915) in Enfield for persons who are eligible and apply to CT Transit for that service.
Alternate Transit Service Available?	NONE.
Least Discriminatory Alternative?	YES. This is the least discriminatory alternative in this travel corridor. It affects the smallest proportion and number of low-income riders and riders of color on the day of service. The other cost-saving alternative considered was to eliminate Route G5 entirely. In that case, partial alternative service would be available to The X and Forest Park areas of Springfield on the G1, G2, and X90. However, the number of G5 customers in southern Springfield south of Sumner Avenue who would be without alternative transit service would still be much greater than the number of people affected by eliminating only the portions in Longmeadow and Enfield.

<p>Mitigation and Revised Service Change Proposal</p>	<p>Mitigation is required, as a disparate impact is identified. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none">1. Retain 4 of the 9 trips on weekdays during peak commute times to mitigate the loss of access to Mass Mutual’s Enfield campus and Bay Path College in Longmeadow. Retention of fixed route service means there will be no change to PVTA’s existing ADA van service within the ¼ mi buffer in Enfield CT.2. Post service change information at bus stops and on vehicles in Longmeadow and Enfield.3. Work with major employers MassMutual and Bay Path College to inform key staff prior to service changes and potential impacts to their campuses and encourage outreach to employees and students.
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Option 11: Route X98—Eliminate Route

<p>Route Description</p>	<p>Route X98 is a Tier II Class service that operates Mon-Sat with ten roundtrips per day (2 in the morning, 3 midday, 5 afternoon) from Salvo House north to State Street, Prospect Street, Jackson Street, and the River Valley Coop via Hampshire Plaza. Route X98 also provides transit access to the Northampton Survival Center.</p>  <p> PVTA Route X98 Connecting Route </p>
<p>Proposed Change and Rationale</p>	<p>This option proposes eliminating Route X98, a total of 10 roundtrips on weekdays and Saturdays. As a “Tier II” class service, the performance standard for Route X98 is 20 passengers per trip. However, Route X98 does not meet this standard (average 2 passengers per trip).</p>
<p>Communities Affected</p>	<p>Northampton</p>
<p>Effective Date</p>	<p>9/3/17</p>
<p>Major Service Change?</p>	<p>YES. 100% of route miles would be eliminated on days that the service currently operates (Mon-Sun), which exceeds the major service change threshold of 25%.</p>
<p>Customers Affected?</p>	<p>15 customers estimated per day.</p>

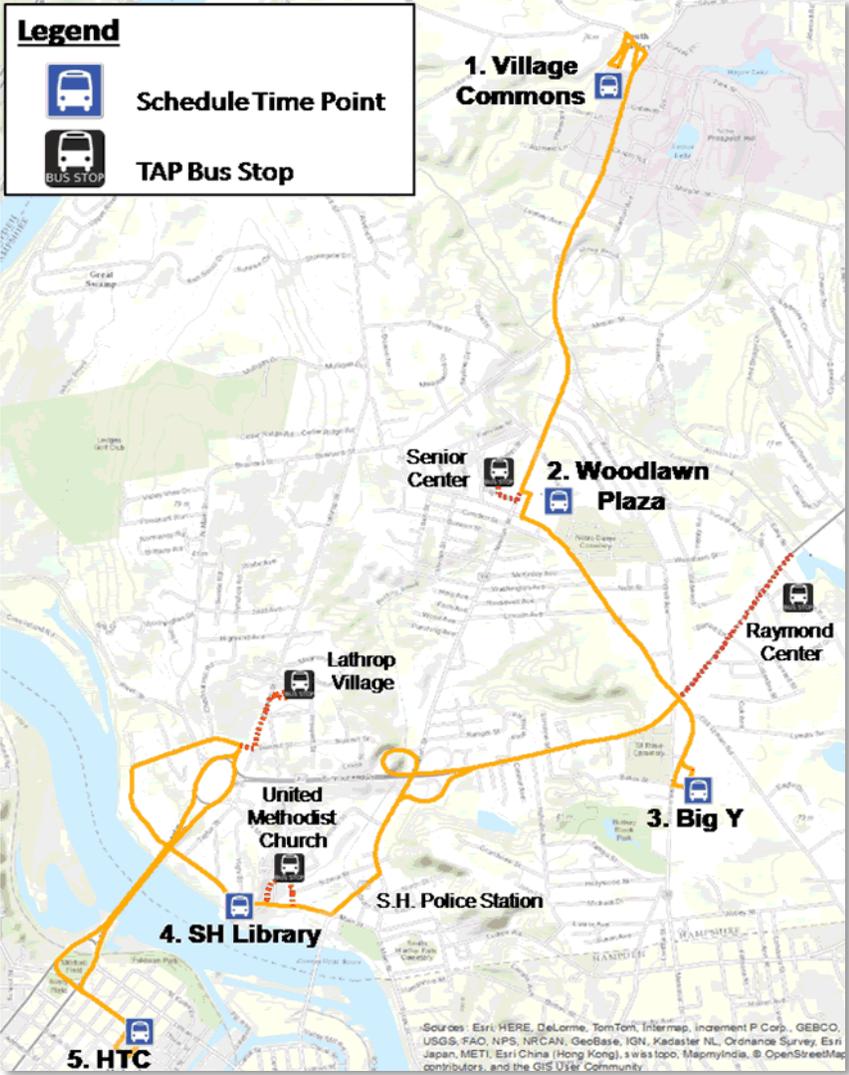
<p>Disparate (racial discrimination) Impact?</p>	<p>NO DISPARATE IMPACT: 27% of riders of Route X98 are people of color, and the remaining 73% are white. The minority/non-minority difference is therefore -46%, which is less than the +20% policy threshold that is considered to be a disparate impact.</p>
<p>Disproportionate (low-income) Impact?</p>	<p>LIKELY DISPROPORTIONATE IMPACT: 67% of riders of Route X98 are considered “low-income” (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 33% do not have low incomes. Therefore, the low-income/non-low-income difference is +34%, which exceeds the +20% policy threshold that is considered to be a disproportionate impact.</p>
<p>ADA Van Service Impact?</p>	<p>NONE.</p>
<p>Alternate Transit Service Available?</p>	<p>PARTIAL. Route R44 provides service between Hampshire Plaza and Salvo House at the same frequency as Route X98. 78% of ridership on Route X98 is between these points, and will be adequately served by Route R44. No alternate service exists for the Northampton Survival Center. For River Valley Coop employees, a shuttle operates from Hampshire Plaza every 30 minutes.</p>
<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory cost saving alternative in this travel corridor. It affects the smallest proportion of low-income riders and riders of color on the day of service.</p> <p>PVTA has revised the schedule on the X98 (in late 2016) to with the goal of encouraging more ridership on the segment between downtown and Hampshire Plaza; however, ridership has not increased.</p> <p>As part of that schedule change, PVTA also considered reducing the number of daily trips on the X98 from 10 to 8 or 6, which would have still triggered a disproportionate impact, and yielded relatively little cost savings.</p>
<p>Mitigation and Revised Service Change Proposal</p>	<p>Mitigation is required, as a disproportionate impact is identified. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Retain 3 of the 10 trips per weekday to provide access to/from the Northampton Survival Center during their food distribution hours. (Service to River Valley Market Coop will be discontinued so that larger buses can be assigned to Route X98.) 2. Restore the former route of Route R44 on Barrett and Jackson Streets, to help assure that low-income riders on Route X98’s route still have hourly transit service to Hampshire Plaza and Northampton center. This will accommodate approximately 78% of current X98 riders, who travel between Hampshire Plaza and Salvo House. 3. Post notices on X98 vehicles and at affected bus stops at least 2 weeks prior to any service change. 4. Provide customer outreach via PVTA website, social media, news media. 5. Distribute 7-day pass at no cost to for X98 riders to encourage use of X98 on its new schedule, as well as the R44 and other alternate services.

Option 12: Tiger Trolley—Eliminate Route

Route Description

The Tiger Trolley is Community Shuttle service that operates from the Holyoke Transportation center to South Hadley Village Commons and Mount Holyoke College. There are 8 roundtrips Mon-Fri every 90 minutes, Travel is via Route 116 and Main Street, with on-demand (Transportation Access Point, or “TAP”) service to destinations shown on the map below.

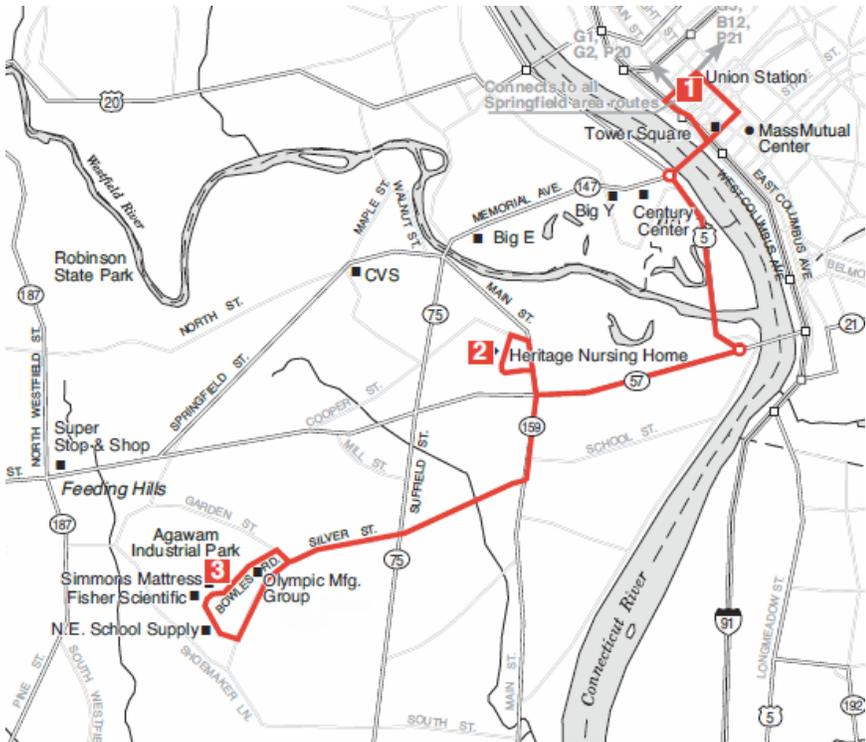
The service vehicle is a 12-passenger lift-equipped van, rather than a full-sized bus, due to tight turns and close maneuvering at some locations.



<p>Proposed Change and Rationale</p>	<p>This option eliminates the Tiger Trolley route. As a Community Shuttle class of service, the performance standard for the Tiger Trolley is 5 passengers per revenue hour. However, the trolley does not meet this standard, with ridership of ranging from 1 to 3 passengers per revenue hour.</p> <p>PVTA worked with the Town of South Hadley in 2016 to improve the routing to reduce travel time and provide service to the Holyoke Transportation Center via the Route 116 Bridge and South Hadley Center, instead of crossing at Route 202, to improve the coverage area. Public hearings were held and additional marketing and outreach was conducted. However, ridership has not increased since the improvements were implemented in January 2017.</p>
<p>Communities Affected</p>	<p>South Hadley, Holyoke</p>
<p>Effective Date</p>	<p>8/27/17</p>
<p>Major Service Change?</p>	<p>YES. 100% of route miles would be eliminated on days that the service currently operates (Mon-Fri), which exceeds the major service change threshold of 25%.</p>
<p>Customers Affected?</p>	<p>15 customers estimated per weekday.</p>
<p>Disparate (racial discrimination) Impact?</p>	<p>NO DISPARATE IMPACT LIKELY: 25% of riders of the Tiger Trolley are people of color, and the remaining 75% are white. The minority/non-minority difference is therefore -50%, which is less than the +20% policy threshold that is considered to be a disparate impact.</p>
<p>Disproportionate (low-income) Impact?</p>	<p>NO DISPROPORTIONATE IMPACT: 25% of riders of Route G5 are considered “low-income” (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 75% do not have low incomes. Therefore, the low-income/non-low-income difference is -50%, which is less than the +20% policy threshold that is considered to be a disproportionate impact.</p>
<p>ADA Van Service Impact?</p>	<p>NONE.</p>
<p>Alternate Transit Service Available?</p>	<p>YES.</p> <p>In the Route 116 corridor, weekday service is provided every 60 minutes by Route R29 between Holyoke Transportation Center and UMass Haigis Mall. Stops include Main Street in South Hadley Falls, Woodlawn Plaza, Mt Holyoke College and Village Commons.</p> <p>In the portions of the route in Holyoke and in the South Hadley Falls area, PVTA Route X90 also provides alternate service along Route 116 toward Chicopee.</p> <p>Direct service to the former Transit Access Points (TAPs) on the Tiger Trolley will no longer be available; customers from those destinations will need to walk or receive a ride to the R29 at stops on Route 116 and Main Street.</p>

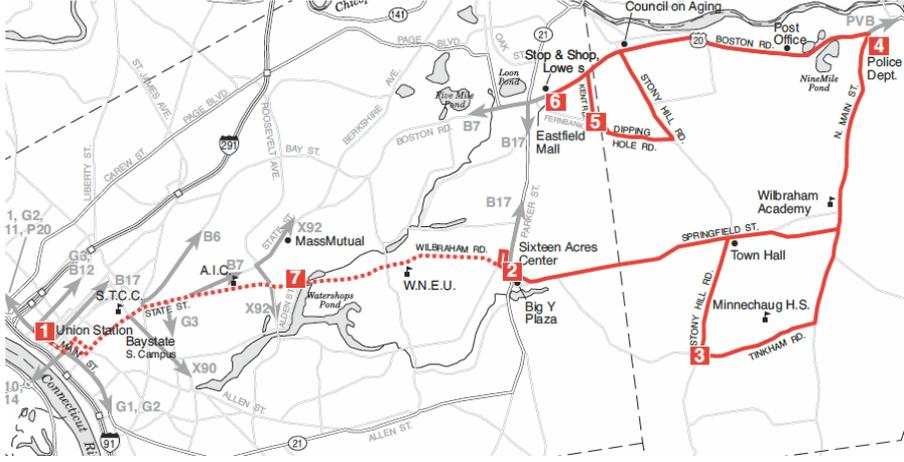
<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory cost-saving alternative in this travel corridor. It affects the smallest proportion of low-income riders and riders of color on the day of service than reductions in service to any of the other routes serving this area.</p> <p>PVTA considered cost-saving reductions in weekday service to the X90 in Holyoke and South Hadley, and those are also being considered as part of Options 19 and 20. Option 19 is not a major service change, but Option 20 would be. In either case, because the X90 carries greater numbers and proportions of riders of color and low income, reductions to the X90 would be more discriminatory.</p> <p>PVTA also considered reductions in weekday service to the R29, which services much of the Tiger Trolley route. However, any reductions to weekday R29 would affect greater numbers and proportions of riders of color (70% for R29, versus 25% for Tiger Trolley) and low income (69% for R29 versus 25% for Tiger Trolley) than would be affected by eliminating the Tiger Trolley. The R29 also carries approximately 16 passengers per trip, versus 1 to 3 passengers on the Tiger Trolley – so approximately five times more riders would be affected.</p>
<p>Mitigation</p>	<p>No mitigation is required because neither disparate nor disproportionate impacts are anticipated. To minimize inconvenience to Tiger Trolley riders and in response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Post information about this service change (route discontinued) and alternate transit service available on all Tiger Trolley vans at least 2 weeks prior to the end of service. 2. Post service change information at bus stops and Transportation Access Points (TAPs) served by Tiger Trolley. 3. Perform special outreach to town officials and major employers along the Tiger Trolley route prior to discontinuance. 4. Distribute one 7-day pass at no cost to former Tiger Trolley riders to encourage use of the alternate transit services. 5. Monitor ridership on R29 weekday, X90, and R24 routes after the Tiger Trolley service ends to identify any capacity or performance issues from additional ridership.

Option 13: Route 14E (Express)—Eliminate Route

<p>Route Description</p>	<p>Route R14E is an Express Class service that operates Mon-Fri with 4 roundtrips per day (1 in the morning, 1 midday, 2 in afternoon) from Springfield Union Station to Heritage Nursing Home and Agawam Industrial Park. Route R14E is designed to provide express bus access to locations not served by Route R14.</p> 
<p>Proposed Change and Rationale</p>	<p>This option eliminates Route R14E, a total of 4 roundtrips on weekdays and Saturdays. As an “Express” class service, the performance standard for Route R14E is 20 passengers per trip. However, Route R14E does not meet this standard (average 8-13 passengers per trip).</p> <p>There are also opportunities to combine service with the underlying R14 local and effectively service the majority of customers now using both routes.</p>
<p>Communities Affected</p>	<p>Springfield, Agawam</p>
<p>Effective Date</p>	<p>8/27/17</p>
<p>Major Service Change?</p>	<p>YES. 100% of route miles would be eliminated on days that the service currently operates (Mon-Fri), which exceeds the major service change threshold of 25%.</p>
<p>Customers Affected?</p>	<p>21 customers estimated per day.</p>
<p>Disparate (racial discrimination) Impact?</p>	<p>NO DISPARATE IMPACT: 43% of riders of Route R14E are people of color, and the remaining 57% are white. The minority/non-minority difference is therefore -14%, which is less than the +20% policy threshold that is considered to be a disparate impact.</p>

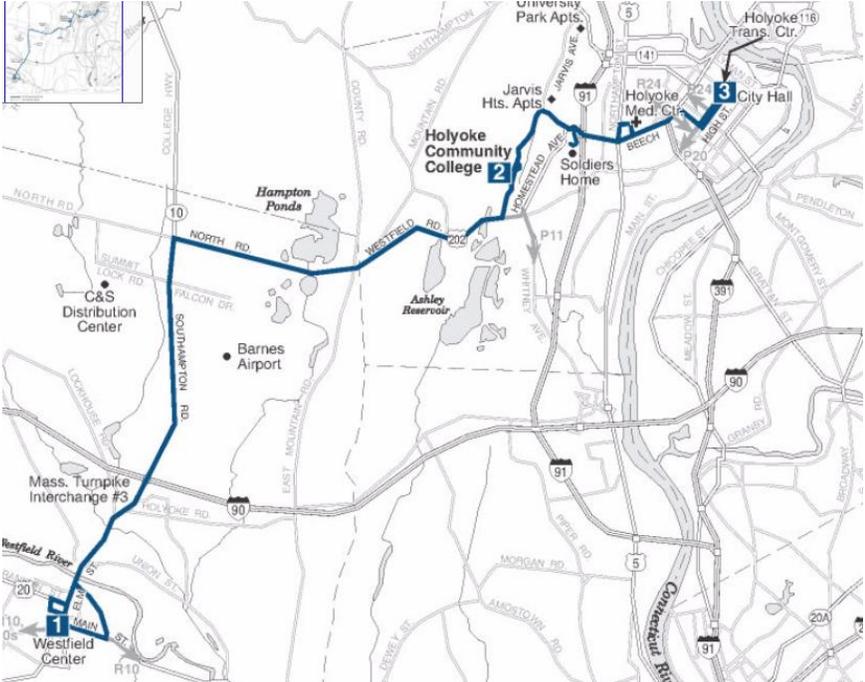
<p>Disproportionate (low-income) Impact?</p>	<p>LIKELY DISPROPORTIONATE IMPACT: 68% of R14E riders are considered “low-income” (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual); the remaining 32% do not have low incomes. Therefore, the low-income/non-low-income difference is +36%, which exceeds the +20% policy threshold that is considered to be a disproportionate impact.</p>
<p>ADA Van Service Impact?</p>	<p>NONE.</p>
<p>Alternate Transit Service Available?</p>	<p>NONE.</p>
<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory cost-saving alternative in this travel corridor. It affects the smallest proportion of low-income riders and riders of color on the day of service.</p>
<p>Mitigation and Revised Service Change Proposal</p>	<p>Mitigation is required because a disproportionate impact is identified. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Modify Route 14 to include 4 trips (same number) per weekday to Heritage Nursing Home and Agawam Industrial Park. (These destinations account for roughly half of passengers currently using the Route R14E.) 2. Work with Agawam Industrial Park to coordinate revised R14 arrival/departure times to better accommodate work shift changes. 3. Provide customer information on the PVTA website, social media, and at Springfield Union Station for revised R14 schedule serving same destinations. 4. Distribute one 7-day pass at no cost to former riders of the R14E to encourage use of Route R14 on its new schedule.

Option 14: Route R27—Eliminate Route

<p>Route Description</p>	<p>Route R27 is a Village Connector Class service that operates Mon-Fri with 5 one-way trips per day (2 inbound in the morning, 1 outbound in midday, 1 outbound and 1 inbound in afternoon) between Eastfield Mall and Springfield Union Station via Sixteen Acres. Route R27 is designed to provide access to/from downtown Springfield, Wilbraham, and the Eastfield Mall.</p>  <p>The map shows the route R27 in red, starting at Union Station (1), passing through Springfield (2, 3), Wilbraham (4), Sixteen Acres (5), and ending at Eastfield Mall (6). A return route is shown with a dotted red line (7).</p>
<p>Proposed Change and Rationale</p>	<p>This option eliminates Route R27, a total of 5 one-way trips on weekdays. As a Village Connector service, the performance standard for Route R27 is 15 passengers per revenue hour. However, Route R27 does not meet this standard, averaging 7-14 passengers per revenue hour.</p> <p>There are also opportunities to consolidate R27 service with existing B17 service, which also travels to Eastfield Mall along this same route.</p>
<p>Communities Affected</p>	<p>Springfield, Wilbraham</p>
<p>Effective Date</p>	<p>8/27/17</p>
<p>Major Service Change?</p>	<p>YES. 60% of route miles would be eliminated on days that the service currently operates (Mon-Fri), which exceeds the major service change threshold of 25%.</p>
<p>Customers Affected?</p>	<p>13 customers estimated per day.</p>
<p>Disparate (racial discrimination) Impact?</p>	<p>NO DISPARATE IMPACT: 50% of riders of Route R27 are people of color, and the remaining 50% are white. The minority/non-minority difference is therefore 0%, which is less than the +20% policy threshold that is considered to be a disparate impact.</p>
<p>Disproportionate (low-income) Impact?</p>	<p>NO DISPROPORTIONATE IMPACT: 0% of riders of Route R27 are considered “low-income” (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 100% do not have low incomes. Therefore, the low-income/non-low-income difference is -100%, which is less than the +20% policy threshold that is considered to be a disproportionate impact.</p>
<p>ADA Van Service Impact?</p>	<p>NONE.</p>

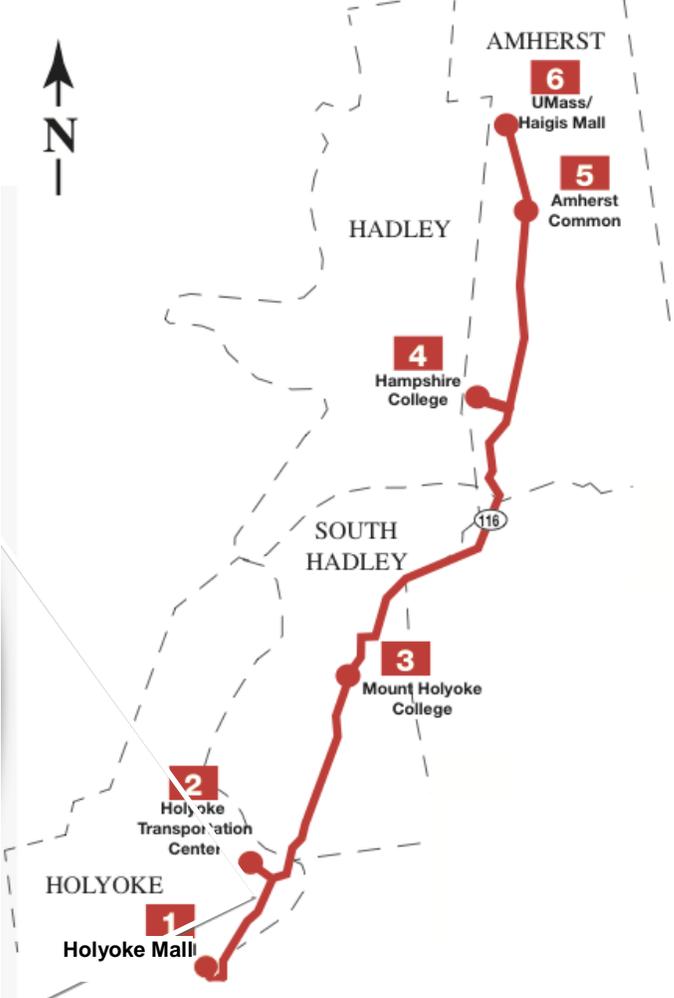
<p>Alternate Transit Service Available?</p>	<p>PARTIAL. Two of the five trips provided by Route R27 are presently operated as Route B17 variants. These trips will continue to be operated, ensuring that Wilbraham retains transit access to Eastfield Mall, Sixteen Acres, and downtown Springfield.</p>
<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory alternative in this travel corridor. It affects the smallest proportion of low-income riders and riders of color on the day of service.</p>
<p>Mitigation and Revised Service Change Proposal</p>	<p>Mitigation is not required, as there are no disparate or disproportionate impacts required. To minimize inconvenience to customers, PVTA will:</p> <ol style="list-style-type: none"> 1. Retain 3 trips per day that were being operated as R27 trips and add them to the B17 schedule to consolidate the service provided by these two routes. This will retain the same level of service to Wilbraham. 2. Post notices on R27 buses, at Union Station, and other key location on the route at least 2 weeks prior to this service change. 3. Provide customer information on PVTA website, social media, and other outlets.

Option 15: Route B23—Eliminate Saturday Service

<p>Route Description</p>	<p>The B23 is a Village Connector service that operates 15 trips Mon-Fri every 60 min and 5 trips on Saturday every 120 min between the Holyoke Transportation Center and the Olver Transit Pavilion in downtown Westfield. Travel is via the Holyoke Soldiers Home, Holyoke Community College, Route 202 and Westfield Road. At the Westfield Transit Pavilion, the B23 connects to the R10 and R10S, both of which provide a short ride to Westfield State University—and key destination for students on class days.</p> 
<p>Proposed Change and Rationale</p>	<p>This option eliminates Route B23 Saturday service. As a Village Connector class service, the B23 has a performance standard of 15 passengers per revenue hour. The B23 usually exceeds this standard on weekdays, carrying 12 to 28 passengers per revenue hour, depending on the month and academic calendar at Westfield State University. But on Saturdays, passenger volumes are typically just 5 passengers per revenue hour.</p>
<p>Communities Affected</p>	<p>Holyoke, Westfield</p>
<p>Effective Date</p>	<p>8/27/17</p>
<p>Major Service Change?</p>	<p>YES. 100% of route miles would be eliminated on day that service operates (Saturday), which exceeds the major service change threshold of 25%.</p>
<p>Customers Affected?</p>	<p>28 estimated on Saturdays.</p>
<p>Disparate (racial discrimination) Impact?</p>	<p>NO DISPARATE IMPACT: 42% of route riders are people of color and 58% are white. The minority/non-minority difference is therefore -16%, which does not exceed the +20% policy threshold considered to be a disparate impact.</p>

Disproportionate (low-income) Impact?	<p>LIKELY DISPROPORTIONATE IMPACT: 70% of route riders are considered “low-income” (defined in this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 30% are not low-income. Therefore, the low-income/non-low-income difference is +40%, which exceeds the +20% policy threshold that is considered to be a disproportionate impact.</p>
ADA Van Service Impact?	<p>NONE.</p>
Alternate Transit Service Available?	<p>PARTIAL. The majority (57%) of B23 Saturday ridership occurs between the Soldiers Home and downtown Westfield. Among these riders, for those who are traveling from downtown Holyoke to downtown Westfield, the alternate transit is to take Route P21 (or Route 21E, if it is not eliminated) from HTC to Springfield Union Station and transfer to the R10 to Westfield.</p> <p>For riders seeking to reach destinations in the part of the corridor from Cherry Street and Northampton to Route 202 to Westfield Road, there is no alternate transit service on Saturday.</p> <p>For the remaining 43% of Saturday riders who are not traveling west of Northampton Rd, alternative transit is available in downtown Holyoke using the 7 hourly trips of the R24 to destinations that include Holyoke Hospital, Stop & Shop, City Hall, YMCA, Transportation Center, and other destinations along Dwight and Maple Streets; service to the east side of downtown is also available on the X90 (and R29, if it is not eliminated).</p>
Least Discriminatory Alternative?	<p>YES. This is the least discriminatory cost-savings alternative in this corridor. It affects the smallest number and proportion of riders of color and low incomes.</p> <p>PVTA considered reductions to other routes that can be used to travel between Holyoke and Westfield on Saturdays (P20 or P21 transferring to the R10); however, these would trigger a disparate impact and aggravate the existing disproportionate impact because the proportions of low-income and riders of color who regularly ride those routes (P20, P21, R10) are significantly greater than on the B23.</p> <p>Another possible alternative service change that was considered would be to reduce the number of trips from 5 to 2 per day (1 in morning; 1 in the afternoon); the feasibility and savings of this require additional evaluation.</p>
Mitigation	<p>Mitigation is required because there is a disproportionate impact to low-income riders. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Encourage use of alternate service available via R10, P20, and R41. 2. Provide customer education on PVTA website, social media about the availability of alternative transit on Saturday 3. Post notices on buses and bus stops at least 2 weeks before implementation about the availability of alternative transit on Saturday. 4. Distribute 1-day passes at no cost on the first four Saturdays that this service is discontinued to assist former B23 customers needing to make the connection between these two hubs. 5. Monitor ridership and performance of P20, P21, and R10 on Saturdays.

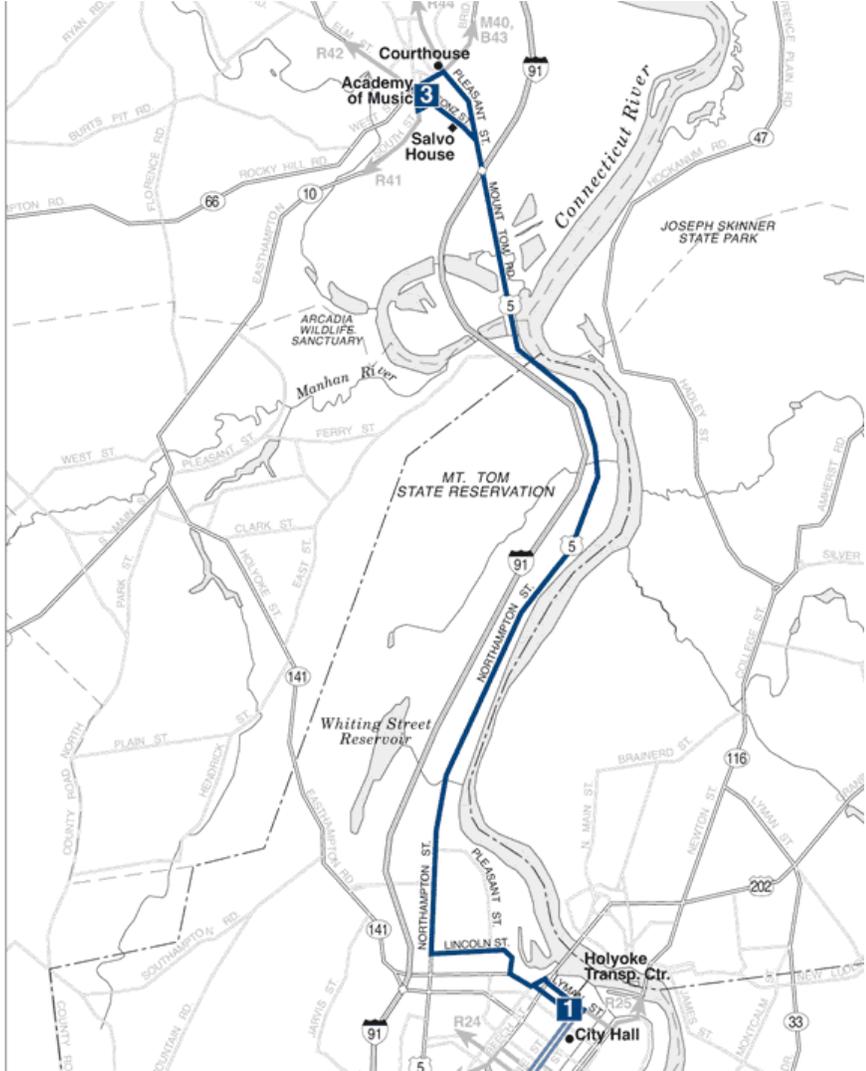
Option 16: Route R29—Eliminate Saturday and Sunday Service

<p>Route Description</p>	<p>Route R29 is an Express Class service that operates Mon-Sun from the Holyoke Mall north to UMass Amherst via Holyoke Transportation Center, Mount Holyoke College, Hampshire College, and Amherst Center. There are 6 roundtrips per day (2 in the morning, 2 midday, 2 late afternoon) during the week, and seven per day on weekends. Route R29 was instituted in 2015 to provide a direct link between UMass Amherst and Holyoke.</p>  <p>The map shows the route R29 as a red line connecting six stops, numbered 1 through 6 from south to north. Stop 1 is Holyoke Mall in Holyoke. Stop 2 is Holyoke Transportation Center in Holyoke. Stop 3 is Mount Holyoke College in South Hadley. Stop 4 is Hampshire College in Hadley. Stop 5 is Amherst Common in Amherst. Stop 6 is UMass/Haigis Mall in Amherst. The route passes through the towns of Holyoke, South Hadley, Hadley, and Amherst. A north arrow is located to the left of the map.</p>
<p>Proposed Change and Rationale</p>	<p>This option eliminates Saturday and Sunday service on Route R29, a total of 6 daily trips. As an Express service, the performance standard for Route R29 is 20 passengers per trip. However, Route R29 does not meet this standard, averaging 9-19 passengers per trip.</p>
<p>Communities Affected</p>	<p>Amherst, Granby, South Hadley, Holyoke</p>
<p>Effective Date</p>	<p>8/27/17</p>
<p>Major Service Change?</p>	<p>YES. 100% of route miles would be eliminated on Saturdays and Sundays, which exceeds the major service change threshold of 25%.</p>
<p>Customers Affected?</p>	<p>83 customers estimated per day (Saturday or Sunday).</p>

<p>Disparate (racial discrimination) Impact?</p>	<p>LIKELY DISPARATE IMPACT: 69% of riders of Route R29 are people of color, and the remaining 31% are white. The minority/non-minority difference is therefore +38%, which is more than the +20% policy threshold that is considered to be a disparate impact.</p>
<p>Disproportionate (low-income) Impact?</p>	<p>LIKELY DISPROPORTIONATE IMPACT: 70% of riders of Route R29 are considered “low-income” (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 30% do not have low incomes. Therefore, the low-income/non-low-income difference is +40%, which exceeds the +20% policy threshold that is considered to be a disproportionate impact.</p>
<p>ADA Van Service Impact?</p>	<p>NONE.</p>
<p>Alternate Transit Service Available?</p>	<p>PARTIAL. Ridership on Route R29 is concentrated in areas where more frequent alternative transit service is available (between Holyoke Transportation Center and the Holyoke Mall, and between Mount Holyoke College and UMass). Ridership on the portion between Mount Holyoke College and Holyoke Transportation Center is less than 3% of overall ridership on Route R29.</p> <p>Route 38 duplicates Route R29 between Mount Holyoke College and UMass while classes are in session, and Route 36 duplicates Route R29 between Atkins Farm and Amherst Center during school vacations. Both routes operate fare-free and more frequently than the R29, although Route 36 does not operate on Sundays.</p> <p>Trips between Holyoke Transportation Center and the Holyoke Mall can be made using the P20, which operates year round and more frequently than the R29.</p> <p>No alternate service exists between Mount Holyoke College and Holyoke. If R29 weekend trips are eliminated, during the academic year passengers would need to ride Route 38 north to Amherst, transfer to Route B43 to Northampton, and then transfer again to Route B48 to Holyoke. During nonacademic time of year, there is no alternate service south of Atkins Farm to Holyoke; to make that trip, passengers would need to ride Route 36 north to Amherst, transfer to Route B43 to Northampton, and transfer to Route B48 to Holyoke.</p>
<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory alternative in this travel corridor. It affects the smallest proportion of low-income riders and riders of color on the day of service.</p> <p>PVTA considered service reductions to Route 38, which operates in much of this corridor, but larger numbers of low-income riders would be affected.</p> <p>PVTA is also considering service reductions to the X90, which overlaps the Holyoke portions of the R29’s route. Those reductions, if approved, will affect significant proportions and numbers of riders of color and low income.</p>

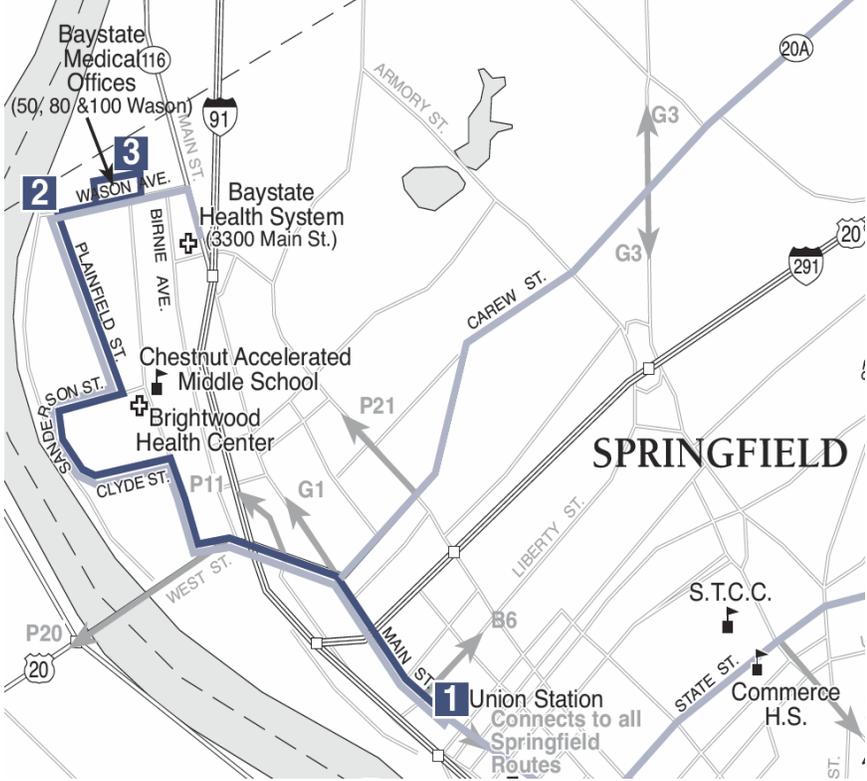
<p>Mitigation and Revised Service Change Proposal</p>	<p>Mitigation is necessary because this service change would have both disparate and disproportionate impacts. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none">1. Retain 2 of the 6 trips on Saturdays and Sundays (1 in early morning; 1 in late afternoon).2. Distribute 1-day passes at no cost on the first four Saturdays that this new schedule is in effect to encourage customers who formerly used the R29 during times when this service will not be available to use alternate transit during those hours on Saturdays and Sundays.3. Post information about this service change to customers aboard R29 buses and at bus stops served by this route.4. Provide route change information to major employers and municipalities on the R29 route.
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Option 17: Route B48—Reduce Saturday Frequency from 30 to 60 min

<p>Route Description</p>	<p>Route B48 is a Tier II Class service that operates Mon-Sun from Academy of Music in Northampton to Holyoke Transportation Center via Route 5. There are 21 trips per weekday; 20 trips on Saturday; and 11 trips on Sundays. Return trips from Holyoke go via Salvo House instead. There are timed transfers available at Holyoke Transportation Center to Route P20 (for the Holyoke Mall) and P21E (for Springfield). Route B48 is designed to provide a fast bus connection between Holyoke and Northampton.</p>  <p>The map shows the route of Route B48, highlighted in blue. It starts at the Academy of Music in Northampton, goes south through Salvo House, then follows Route 5 through Holyoke to the Holyoke Transportation Center. The route also includes a loop back to Northampton via Salvo House. Key landmarks include the Courthouse, Arcadia Wildlife Sanctuary, Whiting Street Reservoir, and Mt. Tom State Reservation. Major roads like Route 91, Route 141, and Route 5 are clearly marked.</p>
<p>Proposed Change and Rationale</p>	<p>This option reduces the Saturday service frequency on Route B48 from every 30 minutes to every 60 minutes. This will reduce the total number of roundtrips from 20 to 10 on Saturdays only. (Weekday service is not affected.) 30-min service was instituted in 2015; prior that, it was every 60 min.</p> <p>As a Tier II class service, the performance standard for Route B48 is 20 passengers per trip. Route B48 approaches but does not meet this standard on Saturdays, averaging 16 passengers per trip.</p>

Communities Affected	Northampton, Holyoke, Easthampton (flag stop area on Route 5 only)
Effective Date	9/3/17 (Saturday 9/9/17 would be first day)
Major Service Change?	YES. 39% of route miles would be eliminated on Saturdays, which exceeds the major service change threshold of 25%.
Customers Affected?	31 customers estimated per day.
Disparate (racial discrimination) Impact?	NO DISPARATE IMPACT: 40% of riders of Route B48 are people of color, and the remaining 60% are white. The minority/non-minority difference is therefore -20%, which is less than the +20% policy threshold that is considered to be a disparate impact.
Disproportionate (low-income) Impact?	NO DISPROPORTIONATE IMPACT: 53% of riders of Route B48 are considered "low-income" (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 47% do not have low incomes. Therefore, the low-income/non-low-income difference is +6%, which is less than the +20% policy threshold that is considered to be a disproportionate impact.
ADA Van Service Impact?	NONE.
Alternate Transit Service Available?	YES. Route B48 will still operate every 60 min on Saturdays, a total of 10 trips. In addition, Peter Pan operates two round trips on Saturdays between Holyoke and Northampton. Amtrak also operates 1 round trip per day between these two cities.
Least Discriminatory Alternative?	<p>YES. This is the least discriminatory cost saving alternative in this travel corridor. It affects the smallest proportion of low-income riders and riders of color on the day of service.</p> <p>PVTA also considered eliminating B48 Sunday service, which also does not achieve the 20 passengers per trip standard; however, that would eliminate all travel opportunities for transit customers in this corridor on Sundays.</p> <p>PVTA also considered eliminating fewer trips on Saturdays (5 instead of 10), but those would still require a second bus and driver, which would offset most savings.</p>
Mitigation	<p>Mitigation is not required. PVTA will take the following steps to minimize inconvenience to B48 customers:</p> <ol style="list-style-type: none"> 1. Post information on B48 buses and bus stops at least 2 weeks prior to the service change. 2. Provide customer information on the PVTA website, social media, and other outlets.

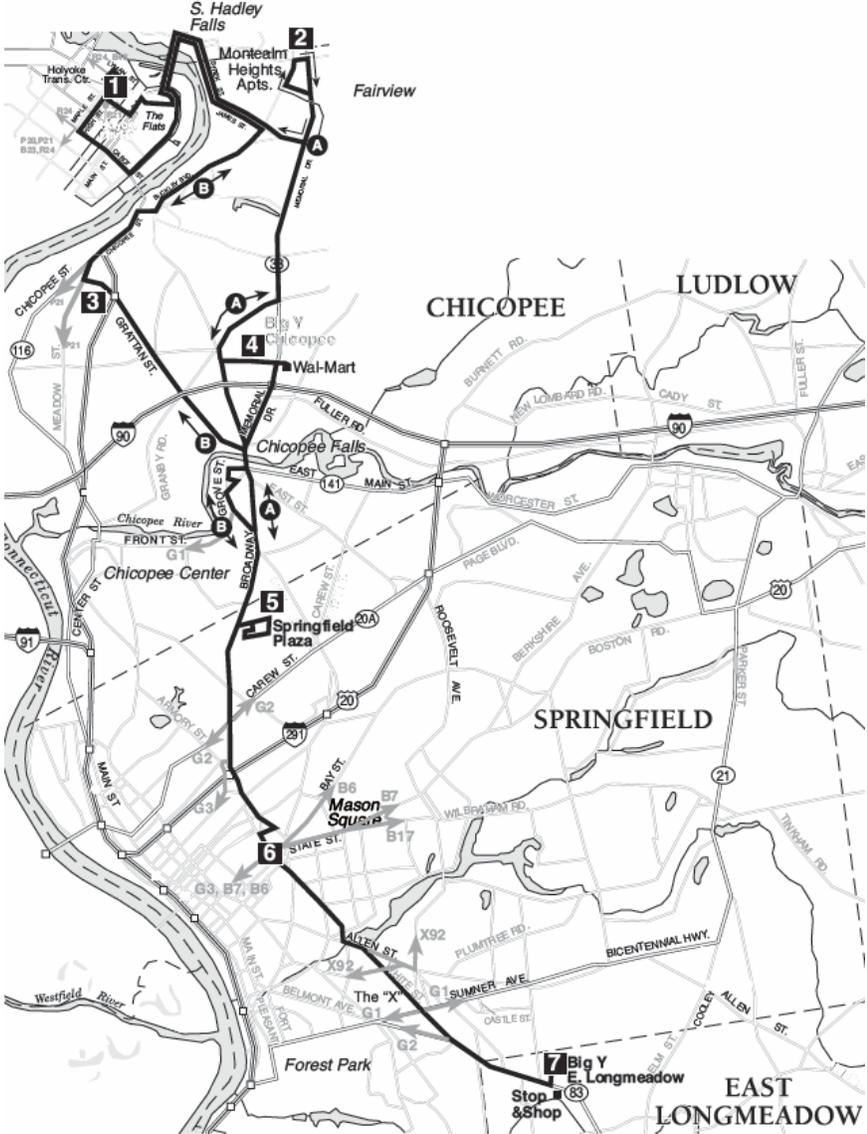
Option 18: Route B4—Eliminate First 3 Weekday Morning Trips; First 2 Saturday Morning Trips; and Last 2 Sunday Evening Trips

<p>Route Description</p>	<p>The B4 is a Tier II service that operates between downtown Springfield and the Bay State Medical Offices on Wason Ave via the Brightwood Neighborhood and Plainfield Street. There are 20 trips Mon-Fri every 40 min; 25 trips on Saturday every 30 min; and 12 trips on Sunday every 60 min. Travel is via North Main Street to Plainfield Street, with deviation to service senior housing on Clyde and Sanderson Streets.</p> 
<p>Proposed Change and Rationale</p>	<p>As a Tier II service, the B4 is expected to carry 20 passengers per trip. However, it has averaged only 8-13 passengers per trip. This option would make the following three trip reductions:</p> <ul style="list-style-type: none"> • On weekdays, eliminate the first 3 trips of the day (6:00, 6:42, and 7:22AM). The first trip of the day would depart Wason Ave at 7:42AM; the last trip of the day would still depart Union Station at 6:20PM. This would reduce the number of weekday trips from 20 to 17. Ridership does not typically exceed 5 passengers on these three trips. • On Saturdays, eliminate the first 3 trips of the day (6:00, 6:30, and 7:00AM). The first trip of the day would depart Wason Ave at 7:30AM; the last trip of the day would still depart Union Station at 5:45PM. This would reduce the number of Saturday trips from 25 to 22. • On Sundays, eliminate the last two trips of the day (6:00 and 6:30PM departures from Union Station) and re-route the 5:45PM departure from Wason Ave to return to the PVTA Garage at 2808 Main Street, rather than Union Station.

Communities Affected	Springfield (Plainfield and Brightwood Neighborhoods, Bay State Medical offices on Wason Ave).
Effective Date	8/27/17
Major Service Change?	NO. Approximately 15% of route miles would be eliminated on weekdays, 10% on Saturdays, and 21% on Sundays, none of which exceed the major service change threshold of 25% during a single service day.
Customers Affected?	8 estimated on weekdays, Saturdays and Sundays
Disparate (racial discrimination) Impact?	NOT APPLICABLE (not a major service change) However: 89% of route riders are people of color and 11% are white. The minority/non-minority difference is therefore +78%, which would exceed the +20% policy threshold for a disparate impact if this were a major change.
Disproportionate (low-income) Impact?	NOT APPLICABLE (not a major service change) However: 63% of route riders are considered “low-income” (defined in this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 37% are not low-income. Therefore, the low-income/non-low-income difference is +26%, which would exceed the +20% policy threshold for a disproportionate impact if this were a major service change.
ADA Van Service Impact?	NONE.
Alternate Transit Service Available?	<p>MINIMAL. There is no alternative transit for the majority of the neighborhood served by the B4 during the hours that trips are proposed to be eliminated.</p> <p>On weekdays between 6:00AM and 7:40AM, riders who currently take second or third of the first three B4 trips of the day (before 7:42AM) and live in the southern end of the Brightwood neighborhood (i.e., Edgewater Apartments) could walk via Riverside Road or Avocado St to the inbound bus stop on the south side of Route 20/West Street (Pride Station) and catch the P20, the first trip of which arrives at approximately 6:45AM and reaches Union Station at 6:55AM, with trips every 30 min thereafter.</p> <p>However, for riders who currently take the first B4 trip of the day (6:00AM departure), there is no alternate transit. And for riders who live further than walking distance from Route 20, there is no alternative transit at this time of day on weekdays.</p> <p>On Saturdays, there is no alternate transit, as the P20 does not begin serving the bus stop on Route 20 until 7:50AM, which is after the proposed new first Saturday morning trip on the B4</p> <p>On Sundays, there is one P20 trip at the bus stop on Route 20; otherwise, there is no P20 service after the proposed last trip of the B4 at 5:45PM.</p>

<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory cost saving alternative in this travel corridor. It affects the smallest proportion of low-income riders and riders of color. There are no other routes that run between the Plainfield/Brightwood Neighborhood during the times that trips are proposed to be eliminated.</p> <p>PVTA considered eliminating more than 3 trips on weekdays on the B4, but this option would have significant disproportionate and disparate impacts as it would likely be considered a major service change.</p> <p>PVTA also considered eliminating B4 Sunday service entirely. However, this change was not fully evaluated due to the importance mobility for shopping and religious activities on that day of the week and the fact that even more riders (more than 100) would be affected, and that there would be significant disparate and disproportionate impacts.</p>
<p>Mitigation and Revised Service Change Proposal</p>	<p>Mitigation is not required, as this option does not meet the threshold for a major service change. In response to comments received during the public hearing process, PVTA will take the following steps to minimize inconveniences to existing B4 riders:</p> <ol style="list-style-type: none"> 1. Retain the first 3 weekday morning trips as inbound only service from Wason Ave to Union Station. 2. Retain the first 3 Saturday morning trips as inbound only from Wason Ave to Union Station. 3. Retain the last 2 Sunday evening trips as outbound only from Union Station to Wason Ave. 4. Post notices on buses and bus stops at least 2 weeks before this revised schedule goes into effect. 5. Work with Bay State Medical to identify longer term sources of support for weekday early morning service to its Wason Avenue offices.

Option 19: Route X90—Eliminate First 2 Morning Trips Mon-Sat

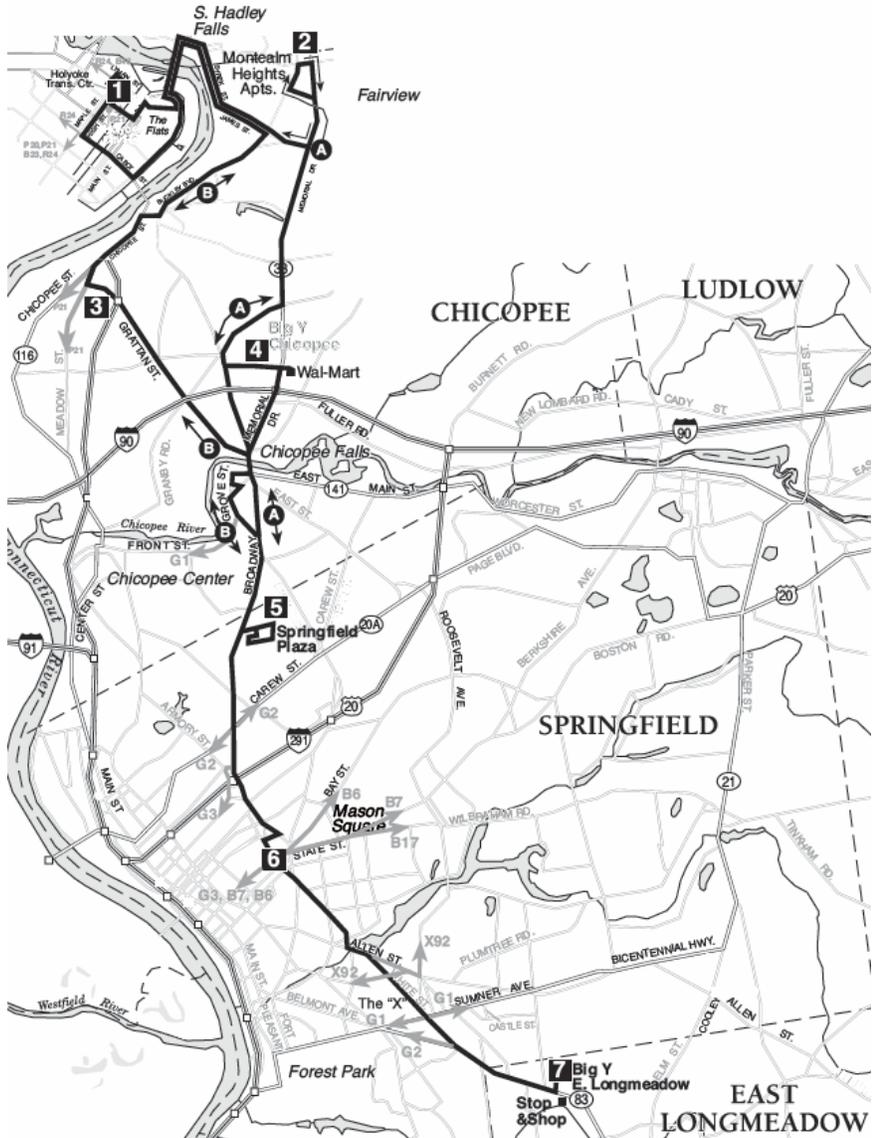
<p>Route Description</p>	<p>The X90 is a Tier II service providing service from the Holyoke Transportation Center to the Big Y store in East Longmeadow. There are 31 trips Mon-Sat every 30 min, and 11 trips on Sundays every 60 min. From East Longmeadow, X90 buses travel via White, Dickinson, and Walnut Streets to STCC, and north on Liberty Street to Springfield Plaza, and into Chicopee Center. After crossing the Willimanset Bridge, the X90 splits into two segments, with “A” buses traveling up Grattan Street to the Willimanset neighborhood, and “B” buses traveling north on Broadway. The segments reunite at James Street and take Route 116 into the Holyoke Flats, downtown, and Transportation Center. This route was created in 2014 to provide crosstown mobility and transfers to PVTA’s routes that radiate from downtown Springfield.</p>  <p>The map illustrates the route of X90 buses. It starts at the Holyoke Transportation Center (1) and travels south through Holyoke (2) and Chicopee (3, 4) to Chicopee Falls (5). From there, it splits into two segments: 'A' (Grattan St) and 'B' (Broadway). Both segments reunite at James St (6) and travel south through Springfield (7) to East Longmeadow (8). Key locations include Holyoke, Chicopee, Ludlow, Springfield, and East Longmeadow. Major roads like I-90, I-91, and I-291 are also shown.</p>
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Proposed Change and Rationale	<p>This option eliminates the first 2 trips of the day (5:50AM departure from Springfield Plaza and 5:45AM departure from East Longmeadow Big Y). This would mean the first southbound departure from Holyoke Transportation Center would be at 7:43AM, and the first northbound departure from East Longmeadow Big Y would be at 6:15AM.</p> <p>As a Tier II service, the X90 is expected to carry 20 passengers per trip. During the most recent year, it averaged 19 passengers per trip, with heaviest rider volumes during the mid-morning and afternoon peaks. The first trip of the day carries approximately 10 riders; however, the second and third trips average 1-3 riders each.</p>
Communities Affected	East Longmeadow, Springfield, Chicopee, Holyoke
Effective Date	8/27/17
Major Service Change?	NO. Approximately 6% of route miles would be eliminated on weekdays and Saturdays which does not exceed the major service change threshold of 25% during a single service day.
Customers Affected?	9 estimated on weekdays and Saturdays
Disparate (racial discrimination) Impact?	NOT APPLICABLE (Not a major service change)
Disproportionate (low-income) Impact?	NOT APPLICABLE (Not a major service change)
ADA Van Service Impact?	NONE.
Alternate Transit Service Available?	<p>PARTIAL. Alternate transit service is available on some segments of the X90 corridor from 5:50AM to 7:00AM (depending on location) when X90 service would no longer be available.</p> <ul style="list-style-type: none"> • In downtown Holyoke, the P20 begins operating at 6:00AM from HTC to Holyoke Mall and Riverdale Street on to Springfield; the P21 begins operating at 5:15 and provides service through to Chicopee Center; and the R24 begins operating at 6:00AM, providing service along the Maple and Dwight Streets. • In Chicopee, the G1 begins operating at 6:25AM with service to/from Walmart Plaza on Memorial Drive to downtown Springfield (Union Station) where through service and/or connections to G2 and G5 provide access to the Dickinson/White/Orange Street areas.
Least Discriminatory Alternative?	NOT APPLICABLE (not a major service change)
Mitigation	<p>Mitigation is not required because this is not a major service change. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Post notices on all X90 and connecting buses and terminals about the availability of alternative service at least 2 weeks prior to discontinuation of the 2 morning trips. 2. Provide customer info on PVTA website, social media, and other outlets.

Option 20: Route X90—Eliminate Sunday Service North of Chicopee Big Y (Memorial Dr)

Route Description

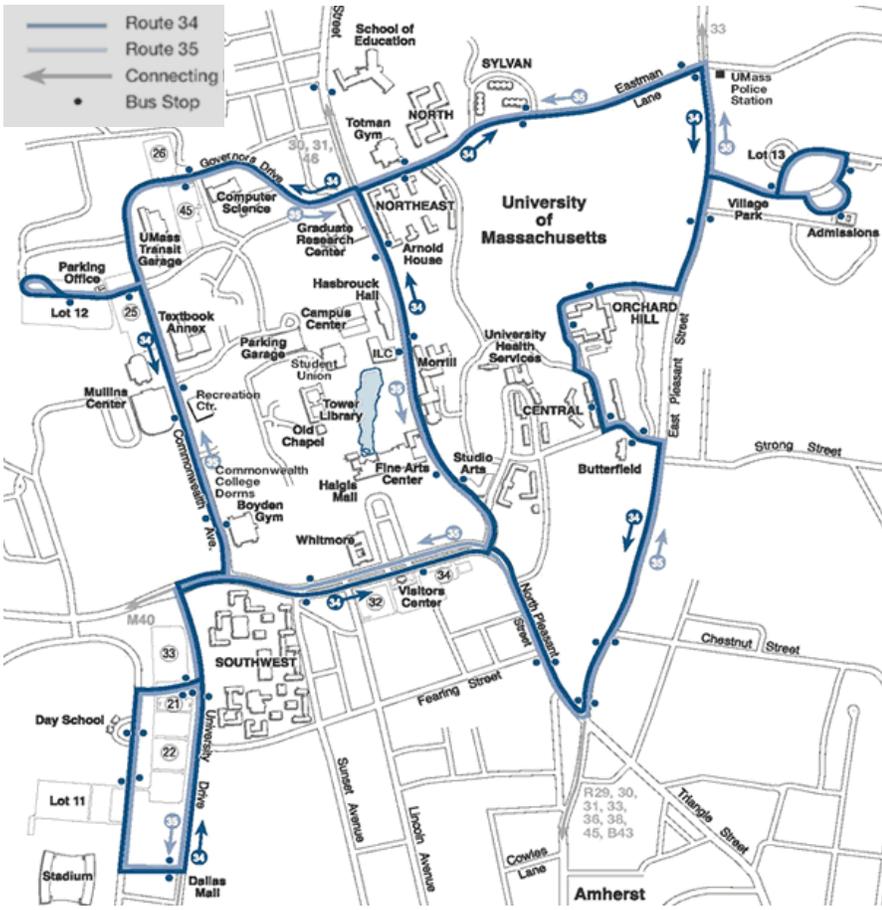
The X90 is a Tier II service with 31 trips Mon-Sat every 30 min, and 11 trips on Sundays every 60 min from the Holyoke Transportation Center to the Big Y store in East Longmeadow. From East Longmeadow, X90 buses travel via White, Dickinson, and Walnut Streets to STCC, and north on Liberty Street to Springfield Plaza, and into Chicopee Center. After crossing the Willimansett Bridge, the X90 splits into two segments, with “A” buses traveling up Grattan Street to the Willimansett neighborhood, and “B” buses traveling north on Broadway. The segments reunite at James Street and take Route 116 into the Holyoke Flats, downtown, and Transportation Center. This route was created in 2014 to provide crosstown connections and transfers to PVTA’s routes that radiate from its downtown Springfield hub.



Proposed Change and Rationale	<p>This option eliminates X90 service on Sundays north of the Chicopee Big Y/Walmart Plaza on the “A” segment on Memorial Drive. The “B” segment would not split off to Grattan Street; all trips would travel along the “A” routing to the Big Y only, where they would turn back.</p> <p>On this part of the X90 route on Sundays, there are an average of 66 trips on both the “A” and “B” segments, which is an estimated 26-33 customers, assuming round trip and transfers reported by customer surveys. This would be an average 6 passengers per trip.</p> <p>However, as a Tier II service, the X90 is expected to carry 20 passengers per trip. During FY2017, it averaged 19 passengers per trip for all runs, with heaviest rider volumes during the mid-morning and afternoon peaks.</p>
Communities Affected	East Longmeadow, Springfield, Chicopee, Holyoke
Effective Date	8/27/17
Major Service Change?	YES. Approximately 50% of route miles would be eliminated on Sundays, which exceeds the major service change threshold of 25% during a single service day.
Customers Affected?	26-33 estimated on Sundays
Disparate (racial discrimination) Impact?	LIKELY DISPARATE IMPACT: 67% of riders of Route R29 are people of color, and the remaining 33% are white. The minority/non-minority difference is therefore +34%, which is more than the +20% policy threshold that is considered to be a disparate impact.
Disproportionate (low-income) Impact?	LIKELY DISPROPORTIONATE IMPACT: 60% of riders of Route R29 are considered “low-income” (defined for purpose of this analysis as the federal poverty rate of \$11,770 per year for an individual), and the remaining 30% do not have low incomes. Therefore, the low-income/non-low-income difference is +20%, which meets the +20% policy threshold that is considered to be a disproportionate impact.
ADA Van Service Impact?	NONE.
Alternate Transit Service Available?	<p>PARTIAL. Alternate transit service is available on the segment of the X90 route between Chicopee Big Y and downtown Holyoke where service would no longer be available on Sundays.</p> <ul style="list-style-type: none"> • In downtown Holyoke, available Sunday service in the area currently served by the X90 is also partially served by the P20, which begins operating hourly service at 9:00AM from the Holyoke Transportation Center to the Holyoke Mall and Springfield Union Station. • In Chicopee, service from Big Y Plaza on Memorial Drive south is available on Sundays on the G1, which begins operating every 45 minutes at 7:00AM. • South of Memorial Drive in Chicopee, there would be no change to X90 service on Sundays.

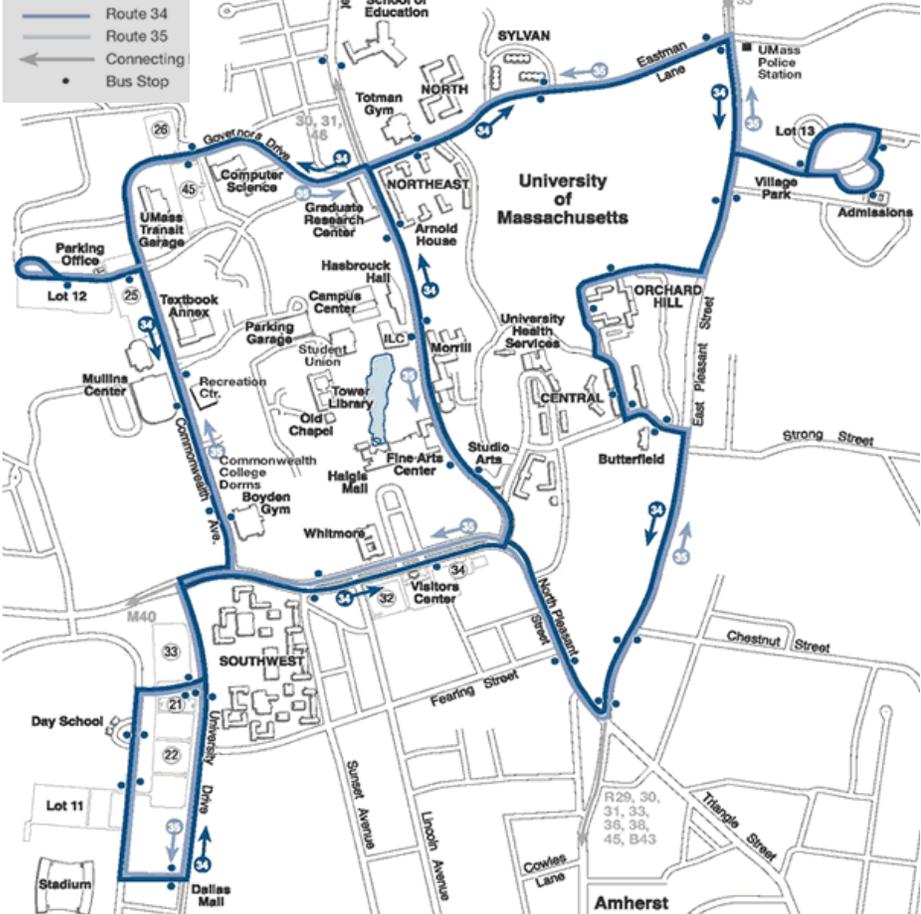
<p>Least Discriminatory Alternative?</p>	<p>YES. This is the least discriminatory cost saving alternative in this travel corridor. It affects the smallest proportion of low-income riders and riders of color. There is alternative service available on Sundays.</p> <p>Another possible alternative service change that was considered to save cost was to eliminate X90 Sunday service entirely. However, this change was not evaluated due to the importance mobility for shopping and religious activities on that day of the week and the fact that even more riders (more than 100) would be affected than the 26 riders who would likely be affected by this option.</p>
<p>Mitigation</p>	<p>Mitigation is required because both disparate and disproportionate impacts are likely. In response to comments received during the public hearing process, PVTA will:</p> <ol style="list-style-type: none"> 1. Post notices on all X90 and connecting buses and at terminals at least 2 weeks prior to discontinuation of Sunday service north of Chicopee Big Y. 2. Provide customer information on PVTA website, social media, and other outlets. 3. Provide 1-day passes at no cost to riders who formerly rode the Sunday X90 north of Chicopee Big Y to encourage use of alternative transit service. 4. Monitor ridership on alternate service routes.

Option 21: Route 34 Campus Shuttle—Eliminate Weekday Trips after 8:00PM

<p>Route Description</p>	<p>Route 34 is a Campus Service route that operates Mon-Fri with 57 roundtrips per day (every 15 minutes) in a figure-eight pattern around UMass campus. Together, Routes 34 and 35 are designed to aid students and staff of UMass in getting around campus.</p> 
<p>Proposed Change and Rationale</p>	<p>This option reduces service on Route 34 by eliminating trips after 8PM, a total of 6 roundtrips. As a Campus Class service, the performance standard for Route 34 is 20 passengers per revenue hour. Route 34 significantly exceeds this, averaging between 30 and 50 passengers per revenue hour overall. This option is proposed because Route 35 offers duplicate service in the same travel corridor (UMass campus).</p>
<p>Communities Affected</p>	<p>Amherst, Hadley</p>
<p>Effective Date</p>	<p>9/3/17</p>
<p>Major Service Change?</p>	<p>NO. 11% of route miles would be eliminated on days that the service currently operates (Mon-Fri), which is below the major service change threshold of 25%.</p>
<p>Customers Affected?</p>	<p>40 customers estimated per weekday.</p>

Disparate (racial discrimination) Impact?	NOT APPLICABLE (not a major service change)
Disproportionate (low-income) Impact?	NOT APPLICABLE (not a major service change)
ADA Van Service Impact?	NONE.
Alternate Transit Service Available?	YES. Route 35 duplicates Route 34, but in the opposite direction. Routes 30, 31, 33, 36, B43, 45, and 46 also duplicate parts of Route 34.
Least Discriminatory Alternative?	NOT APPLICABLE (not a major service change)
Mitigation and Revised Service Change Proposal	Mitigation is not required, this is not a major service change. In response to comments received during the public hearing process, PVTA will: <ol style="list-style-type: none"> 1. Retain all trips proposed for elimination (make no service change).

Option 22: Route 35 Campus Shuttle—Eliminate Trips Before 5:00PM on Saturdays, Sundays, Holidays

<p>Route Description</p>	<p>Route 35 is a Campus Service route that operates Mon-Sun in a figure-eight pattern every 15 minutes on weekdays around UMass campus. There are 19 roundtrips per day during weekends and holidays (every 40-50 min). Together with Route 34, Route 35 is designed to aid students and staff of UMass in getting around campus.</p> 
<p>Proposed Change and Rationale</p>	<p>This option proposes reducing service on Route 35 by eliminating trips before 5PM on weekends and holidays, a total of 8 roundtrips. As a “Campus Service” class service, the performance standard for Route 35 is 20 passengers per revenue hour. Route 35 significantly exceeds this performance standard, averaging between 40 and 70 passengers per revenue hour overall, however, weekend ridership significantly underperforms relative to weekday ridership (only 20% as many passengers on average).</p>
<p>Communities Affected</p>	<p>Amherst, Hadley</p>
<p>Effective Date</p>	<p>9/3/17</p>
<p>Major Service Change?</p>	<p>YES. 42% of route miles would be eliminated on weekends and holidays, which exceeds the major service change threshold of 25%.</p>

Customers Affected?	100 customers estimated per day.
Disparate (racial discrimination) Impact?	NO DISPARATE IMPACT: 36% of riders of Route 35 are people of color, and the remaining 64% are white. The minority/non-minority difference is therefore -28%, which is less than the +20% policy threshold that is considered to be a disparate impact.
Disproportionate (low-income) Impact?	LIKELY DISPROPORTIONATE IMPACT: 85% of Route 35 riders are considered “low-income” (defined as the federal poverty rate of \$11,770 per year for an individual), and the remaining 15% do not have low incomes. Therefore, the low-income/non-low-income difference is +70%, which exceeds the +20% policy threshold that is considered to be a disproportionate impact.
ADA Van Service Impact?	NONE.
Alternate Transit Service Available?	PARTIAL. Routes 30, 31, 33, 36, and B43 duplicate parts of Route 35 on weekends and holidays.
Least Discriminatory Alternative?	<p>YES. This is the least discriminatory cost savings alternative in this travel corridor. It affects the smallest proportion of low-income riders and riders of color on the day of service.</p> <p>PVTA also considered reducing the frequency on this route from every 40-50 min to every 60-70 min. However, because of the short distance of this route, such a schedule would likely require the bus and driver to simply wait an extra 20 minutes without being productive.</p> <p>PVTA also considered reducing weekday frequencies on both Routes 34 and 35; however, there are already overloads on many of those weekday trips, and reducing service would worsen overcrowding.</p>
Mitigation and Revised Service Change Proposal	<p>Mitigation is required, as a disproportionate impact is anticipated. PVTA will:</p> <ol style="list-style-type: none"> 1. Retain all trips that were proposed to be eliminated (make no service change).

6. Public Outreach and Consultation (as of 7/11/17)

PVTA reached out for public comments and engagement about the service change proposals in public meetings, at public hearings, and through email and voicemail comments. This section summarizes the input received from the public through these processes.

6.1 Public Meetings

The public outreach and consultation process for the consideration of the 22 service change options included the following public meetings:

- PVTA Finance Subcommittee on May 23, 2017.
- PVTA Route Subcommittee on May 24, 2017.
- PVTA Advisory Board on May 24, 2017.
- PVTA Route Subcommittee on June 28, 2017.
- PVTA Advisory Board on June 28, 2017.
- PVTA Route Subcommittee on July 18, 2017 (scheduled).
- PVTA Finance Subcommittee in July 19, 2017 (scheduled).
- PVTA Advisory Board on July 19, 2017 (scheduled).

6.2 Public Hearings

In accordance with the PVTA Public Hearing Policy, the PVTA Advisory Board on May 24, 2017 authorized the following 11 public hearings to obtain public input on the 22 service change options presented. These hearings were held on the following dates at the following locations. Each hearing consisted of two sessions, the first beginning at 4:00PM and the second beginning at 6:00PM.

HOLYOKE	Monday, June 19, Holyoke Transportation Center, 206 Maple Street
SPRINGFIELD	Tuesday, June 20, Pioneer Valley Planning Commission, 60 Congress Street
AMHERST	Wednesday, June 21, Bangs Community Center, 70 Boltwood Walk
LONGMEADOW	Thursday, June 22, Bay Path University, Wright Hall, 588 Longmeadow Street
AGAWAM	Monday, June 26, Agawam Public Library, 750 Cooper Street
SOUTH HADLEY	Tuesday, June 27, South Hadley Public Library, 2 Canal Street
WILBRAHAM	Wednesday, June 28, Senior Center, 45B Post Office Park
NORTHAMPTON	Thursday, June 29, City Council Chambers, 212 Main Street
SUNDERLAND	Wednesday, July 5, Sunderland Public Library, 20 School Street
WESTFIELD	Thursday, July 6, Olver Transit Pavilion, 10 Arnold Street
CHICOPEE	Monday, July 10, Chicopee City Hall, 17 Springfield Street

The number of non-staff attendees is reported. Comments and themes are summarized below. At each meeting, PVTA staff presented summaries of the 22 options, focusing on those that were likely to be most relevant to the attendees in the geographic area in which the hearing was held. Key themes of public comments received were:

Location	Attendees*	General Themes of Public Comments Made**
HOLYOKE	10	<ul style="list-style-type: none"> • Please do not cut Route G5 to Enfield CT. Peter Pan is too expensive. • Early morning runs on X90 should be kept. • PVTA should be expanding service and creating more interconnections with transportation services in other regions. • Holyoke Community College depends on PVTA • At least one of the express routes should be kept. • P21E is a very busy route and should be kept. • There is alternative transit to make up for loss of Tiger Trolley.
SPRINGFIELD	42	<ul style="list-style-type: none"> • Route B4 changes will affect employment. • Fare increase should be considered. • Legislature should be contacted for adequate funding. • Service cuts have adverse environmental consequences. • Route P20E changes should not be made. • Impacts to people with disabilities should be considered. • Bus service cuts are discriminatory on basis of race and income. • Route R14E should be kept or modified. • Homeless people are especially dependent on public transportation; please do not reduce service. • We should be adding service to Union Station, not reducing it.
AMHERST	26	<ul style="list-style-type: none"> • Please do not eliminate Routes 39, M40, R29. • Five Colleges has been left out of the public process. • People who are homeless and in poverty depend on public transportation; please do not reduce service. • Academic institutions contribute more than \$600,000 to municipalities to support PVTA. • Some of the proposed cuts would leave students who are coming back for the fall semester with no way to reach classes on other campuses. • Bus service supports the local economy. • A fare increase and/or surcharge for service outside PVTA service area should be considered.
LONGMEADOW	13	<ul style="list-style-type: none"> • General concern about loss of ADA van service if Route G5 is reduced. • People in the south end of Longmeadow depend on Route G5. • G5 service to Bay Path is important for students; also major employer. • People with disabilities also ride the fixed route bus, so reduction of G5 would be a loss for them. • PVTA should consider reducing G5 service, not cutting it all.

AGAWAM	11	<ul style="list-style-type: none"> Route 14E is critical for employees of Industrial Park and Heritage Nursing Home. Please retain this route. Bus service is essential for employment in Agawam Seniors at Heritage depend on bus service for families visiting State funding of public transportation is unfair to Western Mass. The cuts to the P20E and P21E will cause overcrowding on the P20 and P21 locals.
SOUTH HADLEY	33	<ul style="list-style-type: none"> Many people depend on the P21E. Tiger Trolley should be retained. Town of South Hadley does not support service reductions.
WILBRAHAM***	5	<ul style="list-style-type: none">
NORTHAMPTON	70	<ul style="list-style-type: none"> Route M40 is important service for commuters to UMass and should be retained. Route 39 is important for service between Mount Holyoke and Hampshire; a petition to keep this route is being circulated that now has 700 signatures and will be submitted by July 11. X98 should be retained because many families use it to access the Survival Center and food pick ups. There is not enough information being provided about PVTA's reasons and methods for choosing the routes for changes. PVTA needs to clarify that most options involve changes to service, not eliminations. Some confusion about whether or not service changes are being considered for Route B43 (they are not). Route R29 is an important service that should be retained.
SUNDERLAND	27	<ul style="list-style-type: none"> Many people are on vacation and not able to comment. People with disabilities depend on the bus to access services, jobs, other critical daily trips. Loss of service would be a real hardship for many students. There needs to be more of public transit funding, not less. Cutting bus service is unfair to working class, people with low incomes; car drivers won't be affected.
WESTFIELD	8	<ul style="list-style-type: none"> Could B23 run later on weekdays? That would be a good trade-off. The transfers on Saturdays to make the same trip that the B23 now makes are too long. Nobody will ride that long a trip. College students will be affected by B23 reduction. Rider depends on G5 to reach job at MassMutual in Enfield CT. R10 service up Mountain Road wastes time and gas.
Chicopee***	15	
TOTAL	250	

* Both 4:00pm and 6:00pm sessions

**This is not a comprehensive list. Verbatim transcripts are available in the Appendix.

*** Transcript not available as of 7/12/17

6.3 Summary of Public Comment Received

PVTA’s public hearing process encourages members of the public to offer comments at public hearings (as described in Section 6.2), as well as by email and voicemail. PVTA posted legal and general notices of the public hearings and public comment process on the 22 proposed service change options May 25, 2017. The deadline for comments was Tuesday, July 11, 2017 (comments accepted up to 11:59PM). Following is a summary of public comments received as of July 10, 2017. (Because of the unusually large number of comments, a partial total is provided for this draft document. A summary of all comments will be completed by July 19, 2017.

Fig. 6.3-1: Summary of Public Comments Received Related to Potentially Affected Routes

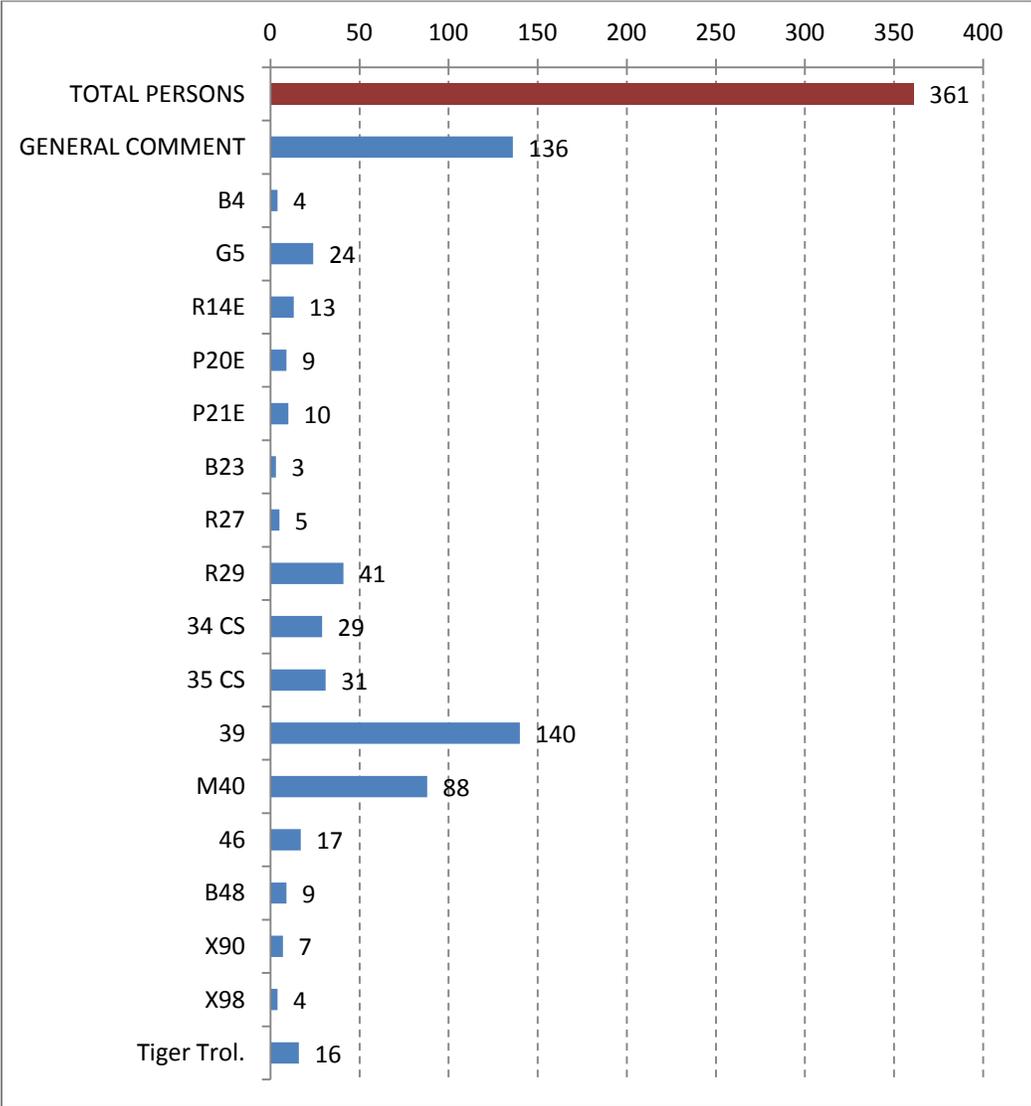
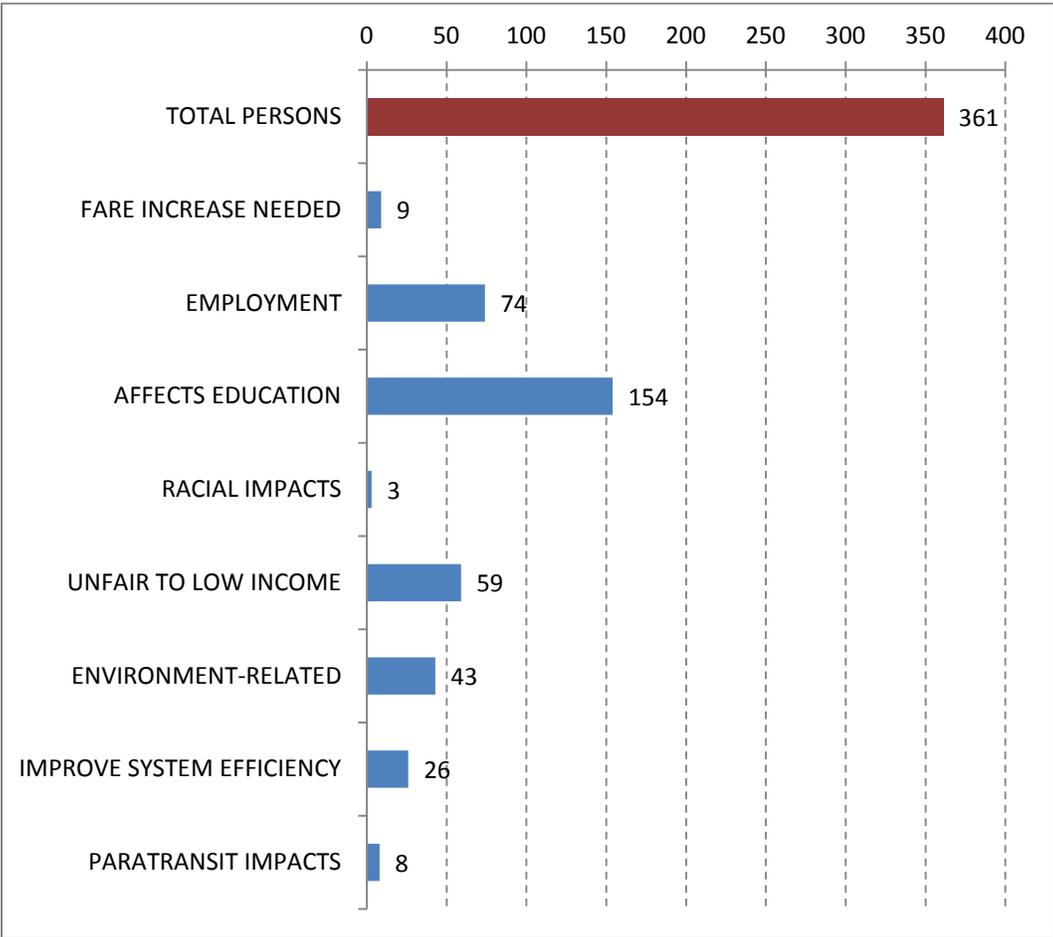


Fig. 6.3-2: Summary of Public Comments Received Involving General Topics



7 Conclusions

PVTA has demonstrated that the proposed service changes with proposed mitigation must be made to achieve the necessary business purpose of balancing the FY2018 operating budget. Without a balanced and approved operating budget for FY2018 (which began on July 1, 2017), the quality and capacity of all PVTA services are at risk, which could cause adverse impacts for a much larger proportion and number of riders.

- The service change options and associated mitigation as proposed are the least discriminatory alternatives available to PVTA for meeting the necessary business purpose of balancing the agency's FY2018 operating budget.
- PVTA conducted an extensive and thorough public hearing process that fulfills the agency's public hearing policy. More than 400 individuals submitted comments at public hearings, by email, or voicemail. A total of 700 individual comments on the service change options were received, read, logged, and categorized.
- PVTA reviewed all the comments and in response made many substantive changes to the original service change proposals to mitigate adverse impacts on customers of color and those with low incomes that were described in the comments received.
- The proposed service changes and mitigation measures are consistent with PVTA's policy for disparate and disproportionate impacts, which states: "...in the event that the proposed service change would have an adverse impact that affects customers of color or those with low-incomes (defined as the federal poverty level) 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... and demonstrate that a legitimate business purpose cannot otherwise be accomplished and that the proposed change is the least discriminatory alternative."

7.1 Service Change Options Sufficiently Mitigated

This Equity Assessment finds that PVTA has proposed adequate mitigation to sufficiently offset either disparate (racial) or disproportionate impacts of the following options:

Option	Route	Original Service Change Proposal as Presented in Public Hearings	Revised Service Change Proposal Based on Public Comments Received ¹
1	M40	Eliminate route	Replace M40 weekday service with 8 one-way express trips on the B43 (4 in morning peak to UMass Amherst; 4 in afternoon peak to Smith College).
2	M40	Eliminate Saturday service	Encourage use of alternate B43 service available during same hours.
4	P20E	Eliminate Saturday service	Retain P20E Saturday express service as it currently operates (no service change).
5	P21E	Eliminate route	Obtain \$500,000 CMAQ grant to operate service for one year (decision pending).
6	P21E	Eliminate Saturday + Sunday service	Obtain \$500,000 CMAQ grant to operate service for one year (decision pending).
7	39	Eliminate route	Retain route (make no service change). Work with academic institutions for future operating funds.
8	39	Eliminate Saturday + Sunday service	See above.
9	46	Eliminate trips to Whately and South Deerfield	Retain 4 trips per weekday (2 in morning peak; 2 in afternoon peak).
10	G5	Eliminate trips to Enfield CT and south Longmeadow	Retain 4 trips per weekday (2 in morning peak; 2 in afternoon peak).
11	X98	Eliminate route	Retain 3 trips per weekday to Survival Center during food distribution hours; modify R44 to serve Jackson and Barrett Streets; distribute one 7-day pass at no cost to former X98 customers.
13	R14E	Eliminate route	Revise Route 14 to serve Heritage Nursing Home and Agawam Industrial Park; coordinate trip times with shift times; distribute one 7-day pass at no cost to former R14E customers.
14	R27	Eliminate route	Add 3 former R27 trips to the B17 schedule to provide the same number of trips per day to Wilbraham.
16	R29	Eliminate Saturday + Sunday service	Retain 2 trips per day (1 in early morning; 1 in late afternoon).
17	B48	Reduce Saturday frequency from 30 to 60 min	Provide customer information about reduced B48 frequency on Saturdays. No change in service span.
18	B4	Eliminate first 3 weekday morning trips; first 2 Saturday morning trips; last 2.5 Sunday evening trips	Retain first 3 weekday morning trips as inbound only service; retain first 3 Saturday morning trips as inbound only; retain last 2 Sunday evening trips as outbound only.
19	X90	Eliminate first 2 early morning trips	Encourage use of partial alternate service available via Routes G1, P20, and P21; obtain funds to continue operating P21E as alternate service weekdays.
21	34 CS	Eliminate trips after 8:00PM on weekdays	Retain all trips (make no service change).
22	35 CS	Eliminate trips before 5:00PM on Sat+Sun+Holidays	Retain all trips (make no service change).

¹ These revised service change proposals are subject to PVTA Advisory Board action on July 19, 2017

7.2 Service Change Options For Which There is No More Equitable Alternative

This Equity Assessment finds that for the following options and proposed mitigation there is no alternative that would be more equitable than that proposed that still achieves the necessary legitimate business purpose of balancing the FY2018 operating budget:

Option	Route	Original Service Change Proposal as Presented in Public Hearings	Revised Service Change Proposal Based on Public Comments Received ¹
3	P20E	Eliminate route	Encourage use of alternate P20 service; distribute one 7-day pass at no cost to former P20E customers.
12	Tiger Tr.	Eliminate route	Encourage use of alternate service available on R29, X90, R24, 38; distribute one 7-day pass at no cost to former Tiger Trolley riders; seek restoration of Mt. Holyoke College-operated van for food shopping.
15	B23	Eliminate Saturday service	Encourage use of alternate service via R10, P20, and R41; distribute up to four 1-day passes on Saturdays to former B23 customers.
20	X90	Eliminate Sunday service north of Memorial Dr	Retain 1 early Sunday morning trip on Route R29; provide customer information about alternate service available via Routes G1, P20, and P21; obtain funds to operate P21E alternate service on Sundays.

Appendices

The following supporting information will be made available via PDF download from www.pvta.com. Link URL addresses will be made available in the final version of this document.

1. PVTA Public Hearing, Disparate, and Disproportionate Impact Policies (adopted 9/23/15).
2. Public hearing sign-in sheets (will available only upon request to allow redaction of personal information to protect privacy).
3. Transcripts of 11 public hearings and comments.
4. Public comments received by email May 28 through July 11, 2017.
5. Summary of public comments received as voicemail messages May 28 through July 11, 2017.
6. Letters and correspondence received May 28 through July 11, 2017.