

ATTACHMENT B

Line 577
Exemption from Express Charges

Fare Equity Analysis
Methodology & Results

Service Planning and Scheduling
Civil Rights Programs Compliance

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1. PROPOSAL OVERVIEW

In an effort to increase ridership on a poorly patronized express bus line, Metro is proposing to eliminate express fare charges on Line 577 effective with the June 2016 Service Change Program.

2. METHODOLOGICAL APPROACH

A Title VI Fare Equity Evaluation is presented herein in accordance with the requirements of Federal Transit Administration Circular 4702.1B. The evaluation assesses whether or not there are adverse disparate impacts on minority passengers and/or disproportionate burdens on low income riders arising from the proposed exemption of Line 577 riders from express fare charges.

Express fare charges are only applicable on Metro Express bus lines, including the Metro Silver Line for which the express premium is built into the line fare. As only the express premium fare is affected by the proposed to lower the fare, the demographics of Line 577 riders will be compared with those of all express riders to determine whether some portion of minority and/or disproportionate passengers in this group is disparately impacted and/or disproportionately burdened by the proposed action.

Data Sources

Data on the ethnicity and household income levels of riders of specific Metro bus lines is obtained from the systemwide Onboard Survey conducted in 2012. Two express lines, Line 439 and Line 445, are no longer operated, however, riders of former Line 445 are now almost entirely users of the Metro Silver Line.

Poverty level household annual income was not determined in the Onboard Survey, so Low Income, defined as less than \$25,000, was used for the evaluation.

Step By Step Methodology

The following steps were performed to complete the analysis:

- Data for the numbers of linked trips surveyed by express route and by ethnicity were obtained from the Onboard Survey database (Table 1);

	MT-439	MT-442	MT-445	MT-450	MT-460	MT-485	MT-487	MT-489	MT-534	MT-550	MT-577	MT-910	
Asian	5		9	13	11	39	53	23	1	18	17	31	220
Black	9	6	44	16	136	160	89	7	171	105	77	86	906
Hispanic	6		19	6	10	26	24	2	21	15	21	18	168
White	13	24	23	6	29	49	12	3	8	39	25	22	253
Native Amer					1	2				2	2	1	8
Totals	33	30	95	41	187	276	178	35	201	179	142	158	1555

Table 1
Surveyed Linked Trips by Route and by Ethnicity

- Data for the numbers of linked trips surveyed by express route and by household income category were obtained from the Onboard Survey database (Table 2);

	MT-439	MT-442	MT-445	MT-450	MT-460	MT-485	MT-487	MT-489	MT-534	MT-550	MT-577	MT-910	
\$10,000-\$14,999	2	2	10	2	28	30	19	2	41	32	25	14	207
\$15,000-\$24,999	1	1	12	3	34	32	22		58	35	14	21	233
\$25,000-\$34,999	2	3	12	2	27	41	17	5	31	26	22	17	205
\$35,000-\$49,999	9	4	20	1	28	44	36		21	30	20	23	236
\$50,000-\$69,999	3	2	8	1	21	31	19	3	17	9	14	18	146
\$70,000-\$134,999	6	5	10	5	12	18	18	7	2	14	13	11	121
less than \$5,000	4	8	4	5	14	22	7	4	4	13	8	11	104
Totals	5	3	12	10	7	18	11	9	3	5	8	25	116
Totals	32	28	89	36	175	241	158	32	178	167	130	152	1418

Table 2
Surveyed Linked Trips by Route and by Household Income

- The percentages of surveyed linked trips by route and by ethnicity (Table 3), and the percentages of surveyed linked trips by route and by household income (Table 4) were then calculated;

	MT-439	MT-442	MT-445	MT-450	MT-460	MT-485	MT-487	MT-489	MT-534	MT-550	MT-577	MT-910	
Asian	15.15%	0.00%	9.47%	31.71%	5.88%	14.13%	29.78%	65.71%	0.50%	10.06%	11.97%	19.62%	14.15%
Black	27.27%	20.00%	46.32%	39.02%	72.73%	57.97%	50.00%	20.00%	85.07%	58.66%	54.23%	54.43%	58.26%
Hispanic	18.18%	0.00%	20.00%	14.63%	5.35%	9.42%	13.48%	5.71%	10.45%	8.38%	14.79%	11.39%	10.80%
White	39.39%	80.00%	24.21%	14.63%	15.51%	17.75%	6.74%	8.57%	3.98%	21.79%	17.61%	13.92%	16.27%
Native Amer	0.00%	0.00%	0.00%	0.00%	0.53%	0.72%	0.00%	0.00%	0.00%	1.12%	1.41%	0.63%	0.51%
Totals	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table 3
Percentage of Surveyed Linked Trips by Route and by Ethnicity

	MT-439	MT-442	MT-445	MT-450	MT-460	MT-485	MT-487	MT-489	MT-534	MT-550	MT-577	MT-910	
less than \$5,000	0.00%	0.00%	1.12%	19.44%	2.29%	2.07%	5.70%	6.25%	0.56%	1.80%	4.62%	7.89%	3.53%
\$5,000-\$9,999	18.75%	17.86%	11.24%	13.89%	6.86%	7.47%	11.39%	21.88%	1.12%	8.38%	10.00%	7.24%	8.53%
\$10,000-\$14,999	6.25%	7.14%	11.24%	5.56%	16.00%	12.45%	12.03%	6.25%	23.03%	19.16%	19.23%	9.21%	14.60%
\$15,000-\$24,999	6.25%	10.71%	13.48%	5.56%	15.43%	17.01%	10.76%	15.63%	17.42%	15.57%	16.92%	11.18%	14.46%
\$25,000-\$34,999	28.13%	14.29%	22.47%	2.78%	16.00%	18.26%	22.78%	0.00%	11.80%	17.96%	15.38%	15.13%	16.64%
\$35,000-\$49,999	9.38%	7.14%	8.99%	2.78%	12.00%	12.86%	12.03%	9.38%	9.55%	5.39%	10.77%	11.84%	10.30%
\$50,000-\$69,999	12.50%	28.57%	4.49%	13.89%	8.00%	9.13%	4.43%	12.50%	2.25%	7.78%	6.15%	7.24%	7.33%
\$70,000-\$134,999	15.63%	10.71%	13.48%	27.78%	4.00%	7.47%	6.96%	28.13%	1.69%	2.99%	6.15%	16.45%	8.18%
\$135,000 and more	3.13%	3.57%	13.48%	8.33%	19.43%	13.28%	13.92%	0.00%	32.58%	20.96%	10.77%	13.82%	16.43%
Totals	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table 4
Percentage of Surveyed Linked Trips by Route and by Household Income

- The percentages of Line 577 and All Express Minority riders were compared, and the absolute and relative differences between these shares were calculated (Table 5); and

Table 5
Comparison of Minority Rider Shares

	MT-577 All Express	
Minority Share	82.39%	83.73%
Absolute Difference	-1.34%	
Relative Difference	-1.6%	

- Finally, the percentages of Line 577 and All Express Low Income riders were compared, and the absolute and relative differences between these shares were calculated (Table 6).

Table 6
Comparison of Low Income Rider Shares

	MT-577 All Express	
Low Income Share	50.77%	41.11%
Absolute Difference	9.65%	
Relative Difference	23.5%	

3. RESULTS

The Board of Directors has adopted thresholds for determining when disparate impacts and/or disproportionate burdens are imposed by a proposed action.

A disparate impact occurs when the absolute difference between the minority share of impacted riders and the minority share of similarly situated riders not directly impacted exceeds 5%, and/or the relative difference between the minority share of impacted riders and the minority share of similarly situated riders not directly impacted exceeds 35%.

A disproportionate burden occurs when the absolute difference between the low income share of impacted riders and the low income share of similarly situated riders not directly impacted exceeds 5%, and/or the relative difference between the low income

share of impacted riders and the low income share of similarly situated riders not directly impacted exceeds 35%.

In the case of the proposed exemption of Line 577 from express premium charges, Table 5 shows that there is no disparate impact on minority riders from this action. Table 6 shows that there is an impact on low income riders, however, because this is a positive impact, no mitigation measures are required.