## Equity Analysis

For Proposed August 2021 Service Changes

Metro Staff undertook an analysis to identify equity related impacts associated with the proposed service changes for August 2021. The results are as follows:

## Background

The most recent Title VI maps (using Census ACS 2014-2018 estimates) defined 220 Dane County Census Block Groups comprising Metro Transit's service area. Based on population estimates for these 220 Block Groups, the percentage of minority population across the entire service area was $24.8 \%$ - while the percentage of low income population across the entire service area was $14.7 \%$.

Routes 10 \& 27 (existing) and 28 \& 38 (proposed) have bus stop locations within or adjacent 62 of these 220 Block Groups.

18 of these 62 Block Groups had a minority population greater than $24.8 \%$ - while 28 of these 62 Block Groups had a low income population greater than 14.7\%.

## Minority Population impacts

High minority census blocks: The cumulative net change in the number of weekday trips (based on known count of trips eliminated on Routes $10 \& 27$, plus assumed count of trips created on Routes 28 \& 38) serving stops in or adjacent the 18 Block Groups with a minority population greater than $24.8 \%$ was an increase of 38 trips ( $+1 \%$ ).

Lower minority census blocks: The cumulative net change in the number of weekday trips (based on known count of trips eliminated on Routes 10 \& 27, plus assumed count of trips created on Routes 28 \& 38) serving stops in or adjacent the 44 Block Groups with a minority population less than $24.8 \%$ was a decrease of 220 trips ( $-7 \%$ ).

## Low Income Population Impacts

Low income census blocks: The cumulative net change in the number of weekday trips (based on known count of trips eliminated on Routes 10 \& 27, plus assumed count of trips created on Routes 28 \& 38) serving stops in or adjacent the 28 Block Groups with a low income population greater than $14.7 \%$ was a decrease of 238 trips ( $-8 \%$ ).

Non-low income census blocks: The cumulative net change in the number of weekday trips (based on known count of trips eliminated on Routes 10 \& 27, plus assumed count of trips created on Routes 28 \& 38) serving stops in or adjacent the 34 Block Groups with a low income population less than $14.7 \%$ was an increase_of 56 trips (+ 2\%).
"Minority" Block Groups (map below) show a small increase in the number of weekday trips (+38), under the proposed route \& schedule changes, while "Non-Minority" Block Groups would have a decrease roughly five times larger than this in the number of weekday trips (220).

"Low Income" Block Groups (map below) show a decrease in the number of weekday trips of -238 under the proposed route \& schedule changes, while "non-Low Income" Block Groups would have an increase in the number of weekday trips (+56).
"Low Income" Block Groups with substantial decreases in weekday trips are those east of North Street (Route 28 only replaces about half of lost Route 10 trips); Isthmus and West Wash/Regent areas (Route 38 only replaces Route 10 on south half of Isthmus, but not loss of Route 27; Route 38 only replaces Route 10 near parts of West Wash but not remainder of West Wash to/from Regent; Route 38 via Observatory does not replace loss of Route 10 between Charter Street \& Campus Drive).


## Conclusion

Minority status: The analysis showed that non-high-minority census tracts see a decrease in weekly bus trips of ( $-7 \%$ ), while high-minority census tracts see an increase of $+1 \%$. Because the relative difference between the two is $6 \%$ in favor of high minority census tracts, this change does not have a disparate impact.

Income status: Non-low income census tracts see an increase of $+2 \%$ in weekly bus trips, while low income census tracts see a decrease of ( $-8 \%$ ) in weekly bus trips. Because the relative difference between the two is $6 \%$, which is more than our $2 \%$ threshold for a disparate impact, a disparate impact is borne by the aggregate of low income census tracts.

## Appendix - Data used for the Analysis

| CenID | Area | EST_PCT_MIN | MIN | EST_POV_PCT | POV | Rt_10 | Rt_27 | Rt_28 | Rt_38 | Rt_MIN | Rt_\#MIN | Rt_POV | Rt_\#POV |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 550250001002 | Univ Row | 31.35\% | 1 | 8.93\% | 0 | -94 | 0 | , | 48 | -46 | 0 | 0 | -46 |
| 550250002011 | Rosa | 15.47\% | 0 | 8.45\% | 0 | -94 | 0 | 46 | 48 | 0 | 0 | 0 | 0 |
| 550250003001 | Sheboygan | 54.03\% | 1 | 26.86\% | 1 | -94 | 0 | 46 | 48 | 0 | 0 | 0 | 0 |
| 550250003002 | Hill Farms E | 27.77\% | 1 | 2.51\% | 0 | 0 | 0 | 46 | 0 | 46 | 0 | 0 | 46 |
| 550250003003 | Hill Farms W | 30.97\% | 1 | 8.52\% | 0 | 0 | 0 | 46 | 0 | 46 | 0 | 0 | 46 |
| 550250003004 | Eau Claire W | 45.54\% | 1 | 25.18\% | 1 | -94 | 0 | 46 | 48 | 0 | 0 | 0 | 0 |
| 550250004021 | Science | 6.92\% | 0 | 1.28\% | 0 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 46 |
| 550250004081 | W Transfer | 23.71\% | 0 | 14.37\% | 0 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 46 |
| 550250008001 | Bluff N | 32.59\% | 1 | 26.90\% | 1 | -94 | 0 | 46 | 48 | 0 | 0 | 0 | 0 |
| 550250008003 | Midvale E | 10.14\% | 0 | 12.59\% | 0 | -94 | 0 | 46 | 48 | 0 | 0 | 0 | 0 |
| 550250009021 | Breese | 14.45\% | 0 | 62.53\% | 1 | -48 | 0 | 46 | 0 | 0 | -2 | -2 | 0 |
| 550250009022 | Old Univ | 18.52\% | 0 | 14.88\% | 1 | -48 | 0 | 46 | 0 | 0 | -2 | -2 | 0 |
| 550250009023 | Highland E | 42.01\% | 1 | 50.16\% | 1 | -48 | 0 | 46 | 0 | -2 | 0 | -2 | 0 |
| 550250009024 | Highland W | 18.38\% | 0 | 13.27\% | 0 | -94 | 0 | 46 | 48 | 0 | 0 | 0 | 0 |
| 550250011011 | Mills N | 23.10\% | 0 | 80.50\% | 1 | -94 | -20 | 46 | 48 | 0 | -20 | -20 | 0 |
| 550250011012 | Camp Randall | 25.95\% | 1 | 83.49\% | 1 | -94 | -20 | 46 | 24 | -44 | 0 | -44 | 0 |
| 550250011021 | Mem Union | 48.53\% | 1 | 92.59\% | 1 | -47 | -20 | 23 | 24 | -20 | 0 | -20 | 0 |
| 550250011022 | Observatory | 25.80\% | 1 | 0.00\% | 0 | -94 | -20 | 46 | 48 | -20 | 0 | 0 | -20 |
| 550250012001 | Bayview | 45.73\% | 1 | 30.84\% | 1 | 0 | -12 | 0 | 0 | -12 | 0 | -12 | 0 |
| 550250012004 | Mills S | 15.88\% | 0 | 37.11\% | 1 | 0 | -12 | 0 | 0 | 0 | -12 | -12 | 0 |
| 550250016031 | State S | 19.49\% | 0 | 84.24\% | 1 | -70 | -8 | 46 | 24 | 0 | -8 | -8 | 0 |
| 550250016032 | Frances | 42.78\% | 1 | 88.26\% | 1 | -94 | -8 | 46 | 48 | -8 | 0 | -8 | 0 |
| 550250016042 | Gorham W | 7.99\% | 0 | 61.28\% | 1 | -46 | -8 | 46 | 0 | 0 | -8 | -8 | 0 |
| 550250016043 | State N | 24.09\% | 0 | 91.61\% | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 550250016051 | Wash S | 11.46\% | 0 | 44.57\% | 1 | -48 | -12 | 0 | 48 | 0 | -12 | -12 | 0 |
| 550250016052 | Wilson W | 18.14\% | 0 | 25.73\% | 1 | -48 | -12 | 0 | 48 | 0 | -12 | -12 | 0 |
| 550250016061 | Dayton E | 28.94\% | 1 | 56.83\% | 1 | -71 | -4 | 23 | 48 | -4 | 0 | -4 | 0 |
| 550250016062 | Wash N | 12.25\% | 0 | 65.99\% | 1 | -48 | -12 | 0 | 48 | 0 | -12 | -12 | 0 |
| 550250016063 | Kohl Ctr | 22.20\% | 0 | 0.00\% | 0 | 0 | -12 | 0 | 0 | 0 | -12 | 0 | -12 |
| 550250016064 | Dayton W | 14.27\% | 0 | 0.00\% | 0 | -47 | -4 | 23 | 24 | 0 | -4 | 0 | -4 |
| 550250017041 | Capitol W | 22.97\% | 0 | 26.89\% | 1 | -47 | -10 | 23 | 24 | 0 | -10 | -10 | 0 |
| 550250017042 | Capitol S | 19.11\% | 0 | 13.18\% | 0 | -24 | -12 | 0 | 48 | 0 | 12 | 0 | 12 |
| 550250017051 | Capitol E | 9.85\% | 0 | 12.51\% | 0 | 0 | -12 | 0 | 48 | 0 | 36 | 0 | 36 |
| 550250017052 | Blair W | 11.72\% | 0 | 19.14\% | 1 | -46 | -8 | 46 | 0 | 0 | -8 | -8 | 0 |
| 550250017053 | Capitol N | 6.21\% | 0 | 24.78\% | 1 | -46 | -8 | 46 | 0 | 0 | -8 | -8 | 0 |
| 550250018021 | Tenney N | 14.21\% | 0 | 9.39\% | 0 | -46 | -8 | 46 | 0 | 0 | -8 | 0 | -8 |
| 550250018022 | Blair E | 18.40\% | 0 | 17.43\% | 1 | -46 | -8 | 46 | 0 | 0 | -8 | -8 | 0 |
| 550250018041 | Tenney S | 14.53\% | 0 | 13.17\% | 0 | -23 | -4 | 23 | 0 | 0 | -4 | 0 | -4 |
| 550250018042 | Fordem W | 32.88\% | 1 | 14.02\% | 0 | -46 | -8 | 46 | 0 | -8 | 0 | 0 | -8 |
| 550250019001 | Eastwood | 12.65\% | 0 | 8.19\% | 0 | -48 | 0 | 0 | 20 | 0 | -28 | 0 | -28 |
| 550250019002 | Willy S | 7.49\% | 0 | 7.60\% | 0 | -48 | 0 | 0 | 48 | 0 | 0 | 0 | 0 |
| 550250019003 | Willy W | 8.89\% | 0 | 17.52\% | 1 | -48 | -12 | 0 | 48 | 0 | -12 | -12 | 0 |
| 550250019004 | Willy N | 20.30\% | 0 | 17.76\% | 1 | -48 | -12 | 0 | 48 | 0 | -12 | -12 | 0 |
| 550250019005 | Winnebago | 4.36\% | 0 | 2.57\% | 0 | -48 | -12 | 0 | 0 | 0 | -60 | 0 | -60 |
| 550250020002 | Atwood N | 20.13\% | 0 | 14.31\% | 0 | 0 | 0 | 0 | 20 |  | 20 | 0 | 20 |
| 550250020003 | Atwood S | 8.00\% | 0 | 2.56\% | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 0 | 20 |
| 550250020004 | Union Crns | 20.12\% | 0 | 6.53\% | 0 | -94 | -12 | 0 | 20 | 0 | -86 | 0 | -86 |
| 550250021001 | N Transfer | 28.78\% | 1 | 6.24\% | 0 | 0 | -20 | 46 | 0 | 26 | - | 0 | 26 |
| 550250021002 | North E | 10.14\% | 0 | 20.94\% | 1 | -94 | -12 | 46 | 0 | 0 | -60 | -60 | 0 |
| 550250021003 | North W | 6.46\% | 0 | 7.15\% | 0 | -94 | -20 | 46 | 0 | 0 | -68 | 0 | -68 |
| 550250021004 | Fordem E | 11.70\% | 0 | 6.26\% | 0 | -46 | -20 | 46 | 0 | 0 | -20 | 0 | -20 |
| 550250022002 | Aberg | 37.66\% | 1 | 13.45\% | 0 | 0 | -20 | 46 | 0 | 26 | 0 | 0 | 26 |
| 550250027002 | Cot Grv N | 9.00\% | 0 | 8.45\% | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 0 | 20 |
| 550250027003 | E Transfer | 2.81\% | 0 | 14.37\% | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 0 | 20 |
| 550250028001 | Cot Grv S | 5.36\% | 0 | 4.17\% | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 0 | 20 |
| 550250028002 | Turner N | 7.93\% | 0 | 5.47\% | 0 | 0 | 0 | 0 | 12 | 0 | 12 | 0 | 12 |
| 550250029001 | Turner S | 30.21\% | 1 | 20.10\% | 1 | 0 | 0 | 0 | 12 | 12 | 0 | 12 | 0 |
| 550250029002 | Pflaum S | 20.72\% | 0 | 8.65\% | 0 | 0 | 0 | 0 | 12 | 0 | 12 | 0 | 12 |
| 550250029003 | Tompkins | 10.43\% | 0 | 8.93\% | 0 | 0 | 0 | 0 | 12 | 0 | 12 | 0 | 12 |
| 550250032001 | UW Hosp | 67.05\% | 1 | 21.33\% | 1 | -48 | 0 | 46 | 48 | 46 | 0 | 46 | 0 |
| 550250101001 | Shorewood E | 22.44\% | 0 | 5.87\% | 0 | -94 | 0 | 46 | 48 | 0 | 0 | 0 | 0 |
| 550250101002 | Shorewood W | 14.29\% | 0 | 3.35\% | 0 | -94 | 0 | 46 | 48 | 0 | 0 | 0 | 0 |
| 62 |  | 24.80\% | 18 | 14.70\% | 28 | -2731 | -402 | 1587 | 1364 | 38 | -220 | -238 | 56 |

