

Service Change Equity Analysis

January 2025

Detroit
Department of
Transportation



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Introduction

The Federal Transit Administration (FTA) requires transit agencies that receive federal funding to monitor their systems to ensure equitably distributed services in compliance with Title VI of the Civil Rights Act of 1964. To certify performance compliance, an equity analysis on major service changes is required to determine any disparate impact on minority populations or disproportionate burden on lowincome populations.

The Detroit Department of Transportation (DDOT) 2023-2025 Title VI Program Plan defines a major service change as a modification meeting one or more of the following conditions:

- 1. New coverage area that is more than 0.2 miles from the original route.
- 2. A new route (excluding numbering/rebranding).
- 3. An elimination of a route (excluding numbering/rebranding).
- 4. An extension or shortening of a route by 0.25 miles or more.
- 5. A 20 percent or greater change in revenue miles or hours.
- 6. A change in service days on a route.
- 7. A change in service span on a route greater than 2 hours.
- 8. A change in headway greater than 15 minutes.

Four steps should be followed to complete an equity analysis:

- 1. Identify which routes, if any, have undergone a major service change based on the above service standards.
- 2. Notify the community of and receive feedback on the proposed or piloted changes via a Notice of Public Hearing.
- 3. Utilize the latest U.S Census Bureau race and poverty data to classify routes as minority and/or low-income.
- 4. Determine any disparate impact on minority populations or disproportionate burden on lowincome populations.

Step 1: Identify Major Service Changes

On January 20, 2025, DDOT implemented 12-minute headways on route 4 Woodward and changed the end of line from Woodward and Larned to Rosa Parks Transit Center, improving transfers and providing operators with a public restroom. This is the only route that underwent any significant changes in the January 2025 schedule. Since the frequency and alignment of the route were modified, it is necessary to determine if these changes exceeded the thresholds set in conditions 1, 4 and 5, and are therefore considered major service changes.

To identify major service changes, the previous schedule was compared to the January schedule to calculate percent change in weekly revenue hours and miles. The length and alignment of the route were also compared to the original routing to determine if the change met condition 1 or 4.



See Appendix A for full table with all routes and Title VI route classifications.

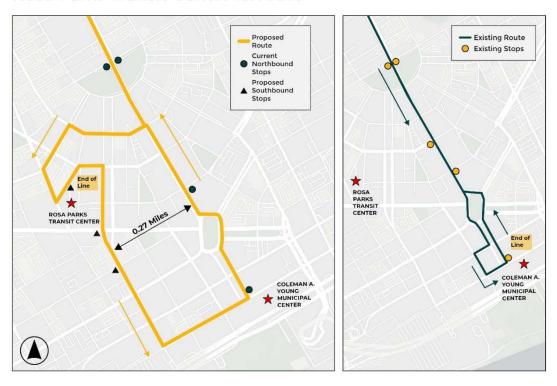
Table 1: Route 4 Woodward Service and Alignment Changes with Title VI Route Classifications

4 Woodward				Route Cl	0.4-1		
Weekly 0	Change in	Leng	gth Change i	in Miles			Major Service
Hours	Miles	Previous	Current	Difference	Minority	Low-Income	Change
16.34%	13.44%	18.60	19.20	0.60	Yes	Yes	YES

Figure 1: Route 4 Woodward End of Line Change to Rosa Parks Transit Center

ROUTE 4: WOODWARD

Rosa Parks Transit Center Reroute



As demonstrated above in *Table 1, 12*-minute headways on route 4 Woodward did not result in enough additional revenue hours or miles to exceed the 20 percent threshold. However, ArcGIS Pro measurements indicate that the overall length of the route was extended by over 0.25 miles and that the new alignment deviated from the original route by 0.27 miles, resulting in a major service change.

Step 2: Public Engagement

On October 17, 2024, DDOT held a virtual Notice of Public Hearing to notify the community of and receive feedback on the proposed January service changes. Although most of the proposed January 2025 changes were postponed to April 2025, the changes to 4 Woodward remained the same.



DDOT also accepted comments via post and email until November 18, 2024. Prior to the October Notice of Public Hearing event, the proposed Woodward service changes were available for viewing on the DDOT website and social media platforms, and flyers providing information on the changes were distributed to the public at DDOT transit facilities and other relevant locations.

See Appendix B for all public hearing materials.

Online and Mailed Public Comments

No comments were submitted via email or post.

Virtual Public Meeting Comments

<u>Robbert Pawlowski:</u> "...this is going to be not just a milestone for certain routes, but it's going to improve more frequency and more accessibility. Especially on routes like Woodward. I'm very excited to see some of these service changes come into place, and I really don't have any complaints with it. I am speaking on behalf of myself as an advocate and full support of this plan taking effect..."

<u>Rochella Stewart:</u> "I like all the changes, I have a couple myself, but I want to especially say thank you for that Woodward improvement, daytime frequency every 12 minutes on the weekdays, and the change of the routing to layover at Times Square, Rosa Parks [Transit Center]..."

Renard Monczunski: "I wanted to speak in favor of the Woodward number 4 improvement on the daytime frequency to every 12 minutes on weekdays, and I really approve of the change of the downtown routing to allow for a layover at the Rosa Parks Transit Center near Times Square. I think that's a really wonderful change, especially for senior citizens, and those with disabilities, both visible and invisible, who find it hard to walk from Woodward and Grand River all the way to the Rosa Parks Transit Center. So, this move is very equitable and makes it more accessible for people to transfer around..."

<u>Brother Cunningham:</u> "I really endorse the Woodward changes for maybe a couple years now or more folks have been wobbling, falling over walkers, canes, having to walk that distance from Grand River...the Woodward changes are superb, and folks have a place to use the bathroom as well, because I don't think Plum Market allows you to use the bathroom there at that stop."

<u>Diane G:</u> "Yes, my name is Diane Gordon. I'm one of the ones who...is very grateful for the changes with the Woodward bus as to oppose of me having to ride the Woodward bus, myself being a bus rider, coming all the way downtown, and then having to walk over 4 blocks to get to a connecting bus when I am a senior."

<u>Lukas Lasecki:</u> "I would like to first say, these are much needed improvements. More frequency, better service is always a welcome change...it is obviously going to benefit everyone involved. I can't think of anyone who would be negatively impacted by these new changes...the Woodward change, I think, is very good. I know a lot of people have been asking for it to go to the [Rosa Parks] Transit Center for a long time, so I fully support that change.

<u>Tracey Hester:</u> "I was calling to comment on the Woodward, Woodward is great. I'm glad y'all changed the Woodward route..."



Step 3: Minority and Low-Income Route Classifications

To determine if the service changes affect minority or low-income populations, routes that serve above-the-average-threshold minority and low-income tracts were identified using ArcGIS mapping software (see figure 2 and 3 below). DDOT utilizes U.S. Census Bureau data as reported by American Community Survey (ACS). This analysis used 2022 race and poverty tables from the latest ACS 5-year estimates. All citizens not defined under the "white only" race/ethnicity classification are considered minority. Households reported below the federal poverty line are considered low-income.

The DDOT service area is currently defined as tracts within one half-mile of all DDOT bus routes. The minority and low-income populations of the service area are divided by the total population to determine the system averages for each. Based on these calculations, 71 percent of the DDOT service area population is minority and 24 percent is low-income. These are the thresholds that were used to classify census tracts as minority and/or low-income.

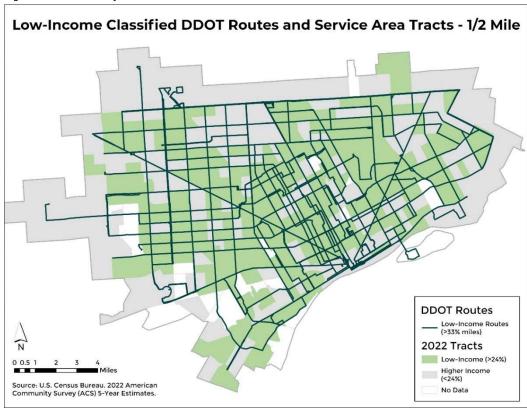
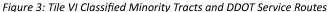
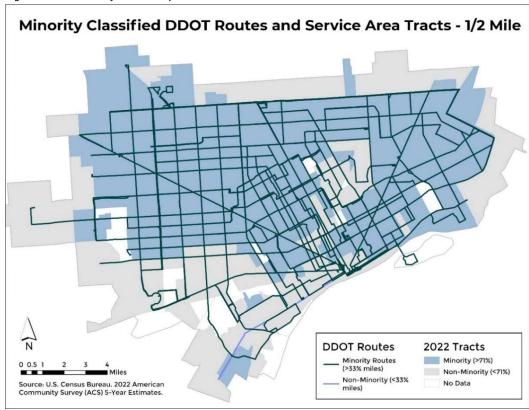


Figure 2: Title VI Classified Low-Income Tracts and DDOT Service Routes





The service area maps are then used to determine which DDOT bus routes travel through at least 33 percent (or one third) minority or low-income classified tracts. If they do, they are considered minority or low-income routes, respectively. Due to Metro Detroit's unique racial and economic makeup, minority and low-income tracts are distributed throughout the service area, and only one route is classified as non-minority (19 Fort). All routes are classified as low-income. Route classifications are shown above in *Figure 2* and *Figure 3* and referenced back in *Table 1*. The percentage of each route's miles through minority and low-income tracts can be found below in *Table 2*.



Table 2: DDOT Minority and Low-Income Route Classifications

		Current	In Minority 1		Tracts		In Low Income Tracts	
	Route	Length	Length	%	Is Minority	Length	%	Is Low-Income
1	Vernor	17.11	7.87	46.00%	Yes	15.16	88.60%	Yes
2	Michigan	21.13	9.04	42.80%	Yes	16.67	78.89%	Yes
3	Grand River	29.51	27.78	94.15%	Yes	27.10	91.82%	Yes
4	Woodward	19.20	18.32	95.39%	Yes	18.32	95.39%	Yes
5	Van Dyke- Lafayette	22.69	21.02	92.64%	Yes	21.02	92.64%	Yes
6	Gratiot	21.07	19.20	91.12%	Yes	18.86	89.49%	Yes
7	Seven Mile	39.84	39.84	100.00%	Yes	35.37	88.78%	Yes
8	Warren	40.36	36.57	90.60%	Yes	40.36	100.00%	Yes
9	Jefferson	14.89	12.77	85.76%	Yes	12.77	85.76%	Yes
10	Greenfield	26.12	19.05	72.94%	Yes	21.52	82.39%	Yes
11	Clairmount	30.61	29.11	95.10%	Yes	30.61	100.00%	Yes
12	Conant	24.81	22.28	89.81%	Yes	23.05	92.92%	Yes
13	Conner	16.13	16.13	100.00%	Yes	16.13	100.00%	Yes
15	Chicago-Davison	25.81	25.81	100.00%	Yes	25.81	100.00%	Yes
16	Dexter	37.66	36.63	97.24%	Yes	35.00	92.92%	Yes
17	Eight Mile	47.84	47.84	100.00%	Yes	42.86	89.59%	Yes
18	Fenkell	30.33	30.08	99.17%	Yes	30.33	100.00%	Yes
19	Fort	16.80	5.31	31.64%	No	14.82	88.19%	Yes
23	Hamilton	22.49	22.49	100.00%	Yes	22.49	100.00%	Yes
27	Joy	31.64	26.50	83.76%	Yes	26.54	83.88%	Yes
29	Linwood	20.00	17.73	88.63%	Yes	17.77	88.86%	Yes
30	Livernois	29.53	21.88	74.08%	Yes	25.76	87.22%	Yes
31	Mack	22.19	22.13	99.70%	Yes	22.13	99.70%	Yes
32	McNichols	48.37	48.37	100.00%	Yes	48.37	100.00%	Yes
38	Plymouth	41.85	36.39	86.96%	Yes	34.10	81.48%	Yes
39	Puritan	14.72	14.72	100.00%	Yes	14.72	100.00%	Yes
40	Russell	28.16	26.29	93.37%	Yes	26.29	93.37%	Yes
41	Schaefer	27.64	19.11	69.14%	Yes	25.57	92.53%	Yes
42	Mid-City Loop	12.68	12.68	100.00%	Yes	12.68	100.00%	Yes
43	Schoolcraft	23.17	23.17	100.00%	Yes	21.74	93.82%	Yes
46	Southfield	24.96	19.41	77.77%	Yes	20.14	80.67%	Yes
47	Tireman	23.52	23.52	100.00%	Yes	23.52	100.00%	Yes
52	Chene	25.38	21.17	83.40%	Yes	23.71	93.42%	Yes
54	Wyoming	31.27	20.71	66.25%	Yes	26.56	84.95%	Yes
60	Evergreen	23.45	19.36	82.59%	Yes	16.77	71.54%	Yes
67	Cadillac-Harper	25.71	23.77	92.43%	Yes	23.77	92.43%	Yes
68	Chalmers	18.65	18.65	100.00%	Yes	16.84	90.32%	Yes



Step 4: Determining Disparate Impact or Disproportionate Burden

Having identified 4 Woodward as a minority and low-income route undergoing major service changes, the benefits and/or disadvantages for those populations must be discussed. DDOT's disparate impact policy, as stated in the 2023-2025 Title VI Program Plan, is as follows: "A major service change to the bus system will be deemed to have disparate impact on minority populations if 20% or more of the affected service falls in census [tracts] with minority populations higher than the DDOT service area average." 19 Fort is the only DDOT bus route that is non-minority. The route saw no additional service with implementation of the January schedule, while minority routes collectively saw a 0.97% and 0.65% increase in weekly revenue hours and miles, respectively. Thus, no disparate impact can be found.

Similarly, DDOT's disproportionate burden policy states: "A major service change to the bus system will be deemed to have a disproportionate burden if 20% or more of a service reduction falls in census block [tract] groups with low-income populations higher than the DDOT service area average." Since all DDOT bus routes are currently classified as low-income, including route 4 Woodward, the major service change did not have a disproportionate burden on low-income populations.

Conclusion

The new 4 Woodward route alignment, implemented in January 2025, resulted in a major service change. The change was presented to the community at a public hearing on October 17, 2024, and was met with overwhelmingly positive feedback. Many community members applauded the change as it would make it easier for senior citizens and riders with disabilities to reach transfers at Rosa Parks Transit Center. Furthermore, the equity analysis found no disproportionate burden on low-income populations or disparate impact on minority populations.



Appendix A

Table A1: Revenue Hour and Mile Changes by Route and Title VI Route Classification

		Weekly Change In				Low-	
Route		Hours	Miles	Major Service Change	Minority Route	Income Route	
1	Vernor	0.00%	0.00%	No	Yes	Yes	
2	Michigan	0.08%	0.00%	No	Yes	Yes	
3	Grand River	0.00%	0.00%	No	Yes	Yes	
4	Woodward	16.34%	13.44%	No	Yes	Yes	
5	Van Dyke-Lafayette	0.00%	0.00%	No	Yes	Yes	
6	Gratiot	0.00%	0.00%	No	Yes	Yes	
7	Seven Mile	0.00%	0.23%	No	Yes	Yes	
8	Warren	0.00%	0.00%	No	Yes	Yes	
9	Jefferson	0.00%	0.00%	No	Yes	Yes	
10	Greenfield	0.00%	0.00%	No	Yes	Yes	
11	Clairmount	0.00%	0.00%	No	Yes	Yes	
12	Conant	0.00%	0.00%	No	Yes	Yes	
13	Conner	0.00%	0.00%	No	Yes	Yes	
15	Chicago-Davison	0.00%	0.00%	No	Yes	Yes	
16	Dexter	0.00%	0.00%	No	Yes	Yes	
17	Eight Mile	0.15%	0.50%	No	Yes	Yes	
18	Fenkell	4.12%	0.00%	No	Yes	Yes	
19	Fort	0.00%	0.00%	No	No	Yes	
23	Hamilton	0.00%	0.00%	No	Yes	Yes	
27	Joy	0.00%	0.00%	No	Yes	Yes	
29	Linwood	0.00%	0.00%	No	Yes	Yes	
30	Livernois	0.00%	0.00%	No	Yes	Yes	
31	Mack	0.00%	0.00%	No	Yes	Yes	
32	McNichols	0.00%	0.00%	No	Yes	Yes	
38	Plymouth	0.00%	0.00%	No	Yes	Yes	
39	Puritan	0.00%	0.00%	No	Yes	Yes	
40	Russell	0.00%	0.00%	No	Yes	Yes	
41	Schaefer	0.00%	0.00%	No	Yes	Yes	
42	Mid-City Loop	0.00%	0.00%	No	Yes	Yes	
43	Schoolcraft	0.00%	0.00%	No	Yes	Yes	
46	Southfield	0.00%	0.00%	No	Yes	Yes	
47	Tireman	-1.77%	0.00%	No	Yes	Yes	
52	Chene	0.00%	0.33%	No	Yes	Yes	
54	Wyoming	0.00%	0.00%	No	Yes	Yes	
60	Evergreen	0.00%	0.00%	No	Yes	Yes	
67	Cadillac-Harper	0.00%	0.00%	No	Yes	Yes	
68	Chalmers	0.00%	0.00%	No	Yes	Yes	



Certain routes with minor changes in revenue miles and hours saw minor timetable and/or scheduling adjustments to account for current road conditions and traffic patterns. These changes were not significant enough to impact customers.

Appendix B

Public Hearing Materials

As previously mentioned, 4 Woodward is the only route undergoing significant changes in January 2025 and the remaining proposed changes were postponed until April 2025. The original text was included to remain accurate to how the information was presented to the public. The red text highlights the 4 Woodward changes.

Figure B1: Notice of Public Hearing Graphic as Distributed to the Public



DDOT is hosting a virtual public hearing on Thursday, October 17, 2024, at 5:00 p.m. to get feedback on proposed service enhancements that would take effect on January 20, 2025, as well as changes that were implemented on June 24, 2024.

When: Thursday, October 17

• Time: 5 p.m.

• Zoom Call-in Number: 1 (312)626-6799

Meeting ID: 962-6808-2855Direct Zoom link: Click to join



If you need a reasonable accommodation to attend this meeting, please contact the ADA Coordinator at least seven (7) business days in advance of the meeting. The ADA Coordinator can be reached by phone at 313-316-2793 or by email at DDOT-ADA@detroitmi.gov. Please note that this is a video conferencing meeting, and a General Sign Language interpreter is present and does not need to be requested.

Proposed January 2025 Service Enhancements (*Now April 2025)

- 2 Michigan, 5 Van-Dyke-Lafayette and 31 Mack 20-minute peak service on weekdays
- 4 Woodward improve daytime frequency to every 12 minutes on weekdays, change downtown routing with a layover on Times Square adjacent to Rosa Parks Transit Center (*This change WILL be implemented in January)
- 18 Fenkell improve weekday daytime frequency to every 40 minutes
- 17 Eight Mile improve midday base service to every 20 minutes on weekdays
- 3 Grand River, 7 Seven Mile, 10 Greenfield improve midday base to every 15 minutes on weekdays
- Saturday and Sunday span improvement (most will run from 7:00am to 9:00 pm) 12 Conant, 13
 Conner, 15 Chicago-Davison, 18 Fenkell, 23 Hamilton, 27 Joy, 29 Linwood, 30 Livernois, 38
 Plymouth, 39 Puritan, 41 Schaefer, 42 Mid-City Loop, 43 Schoolcraft, 52 Chene, 54 Wyoming, 67
 Cadillac-Harper, 68 Chalmers
- 3 Grand River, 6 Gratiot, and 7 Seven Mile improve Saturday daytime to every 20 minutes
- 1 Vernor and 4 Van Dyke 45-minute Sunday service
- 8 Warren 30-minute Saturday and 45-minute Sunday service
- 29 Linwood 50-minute daytime seven days/week
- 23 Hamilton 45-minutes peak service on weekdays

June 2024 Service Changes recently implemented

- 3,7, and 10 15-minute peak service on weekdays (base stays at 20)
- 8, 60 20-minute peak service on weekdays (base stays at 30)
- 13, 15, 19, 30, 38, 41, 43, 52, 54, 67, 68 45-minute peak service on weekdays
- 23, 42 earlier/later trips on weekdays
- 31 start 30-minute service earlier in the morning on weekdays
- 27 50-minute daytime service (6 am to 6 pm) seven days/week, 60 at other times to meet Rosa Parks pulse. Separate the current interline, improved daytime frequency on 29 implemented in September
- 4, 12, 17, 30, 54 Timetable and routing adjustments for Jason Hargrove Transit Center
- 39 Peak period supplemental trips on weekdays

Comments may be submitted by:

Email: <u>DDOTcomments@detroitmi.gov</u>

Mail:

Detroit Department of Transportation



ATTN: Jan 2025 Hearing 100 Mack Ave., Detroit, MI 48201

Figure B2: Notice of Public Hearing Graphic with Proposed Changes as Distributed to the Public



Proposed January 2025 Service Changes:

Woodward improve daytime frequency to 12 minutes on weekdays, and Downtown routing changes to layover on Times Sq at Rosa Parks Transit Center

2 5 31 improve daytime peak frequency to 20 minutes on weekdays

3 7 10 17 18 23 29 improved weekday frequency

Increased weekend service on 24 routes



Governing Official Signature

DDOT's Title VI Service Change Equity Analysis for the January 2025 Service Changes has been submitted to the Director for consideration, awareness, and approval.

Signed by: Robert Cramer	2/12/2025	
Robert Cramer	Date	
Executive Director of Transit		
City of Detroit		