2022 Annual Service Equity Evaluation

October 2023
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Introduction

Metro Transit is committed to delivering transit service that supports the Metropolitan Council’s Thrive Equity outcome. To improve transparency of service-related decisions, the agency has committed to producing an annual report assessing service equity. This annual report contains five main components:

• A description of service changes implemented throughout 2022,
• A summary of ridership trends in 2022,
• Results of the formal Title VI service equity analysis of 2022 service changes,
• Metrics evaluating the equity of service availability, utility, and reliability, and
• Current equity practices in service design.

In 2022, COVID-19 and the ongoing operator shortage continued to impact Metro Transit service and ridership. Although public health improvements made it possible for more people to safely return to in-person activities such as work and school, work-from-home and other pandemic-era behaviors persisted. Meanwhile, Metro Transit’s workforce shortage did not improve, despite efforts to increase wages and recruit more drivers. Staffing levels remained below required levels until December 2022. Major drivers of service changes in 2022 included:

• Limited operator availability due to industry-wide shortages, and
• Launch of METRO D Line, which significantly replaced local corridor service.

2022 Service Changes

Overview

Compared to December 2021, Metro Transit scheduled 15% fewer trips overall in December 2022 due to the workforce shortage. Despite efforts to increase wages and recruit more operators, staffing levels remained below required levels until December 2022. Service changes impacted nearly all route types in the network, except commuter rail which continued to operate the same reduced schedule throughout 2022.1 METRO Bus Rapid Transit (BRT) added trips primarily due to the launch of METRO D Line, which significantly replaced local route service in the corridor. Trip counts for core local, suburban local, supporting local, and commuter routes reflect reductions made in late 2022. Figure 1 depicts the change of weekday trip counts across route classifications. Descriptions of changes throughout 2022 are broken out into Phases I, II, and III in the following sections.

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1 As described in Appendix G of the 2040 Transportation Policy Plan, routes in the regional transit network are classified based on their mode and role within the overall network.
Where service reductions were made, Metro Transit used these principles to guide decision making:

- Maintain the reliability of scheduled service.
- Identify service where customers have alternative trip times or routes, or where populations are more likely to have access to a private vehicle in their household.
- Minimize ridership impact.
- Preserve frequent transit service (every 10 to 15 minutes).
- Evaluate service changes with an eye towards reducing impact on low-income populations and communities of color.

![Weekday Trip Counts](image)

**Figure 1. Weekday Trips by Route Classification, December 2021 and December 2022**

**Phase I – January-March**

Service levels established in late 2021 continued through mid-March 2022. Figure 2 shows weekday service availability by stop in December 2021 that carried through early 2022.

**METRO Bus Rapid Transit lines and Local Bus**

- METRO Orange Line, which opened in December 2021, operated every 15 minutes on weekdays and every 30 minutes on weekends.
- A Line operated every 12 minutes all days.
- C Line operated every 10 minutes all days.
- Twelve local routes remained suspended. (12, 16, 19, 39, 59, 84, 129, 223, 415, 604, 825, Green Line late-night bus)
Commuter and Express Bus

- Limited service on some rush hour-only commuter and express routes continued.
- Service on Route 115 was restored.

METRO Light Rail Transit Blue and Green lines

- Service operated every 12 minutes for most hours, seven days per week.
- Hours of service spanned 4:30 a.m. to midnight.

Service on Northstar Commuter Rail continued to operate two morning inbound trips and two afternoon outbound trips each weekday, with no weekend service.

Figure 2. Weekday Trips by Bus Stop & Light Rail (LRT) Station, December 2021
Phase II – March-August

In March 2022, service was reduced throughout the region by four percent.

- Low ridership branches on three routes were suspended.
- Frequency dropped on the busiest bus routes, usually from 10 minutes to 15 minutes, 15 minutes to 20 minutes, and 20 minutes to 30 minutes.
- Service for high schools and the University of Minnesota was reduced.

Later, Blue Line was closed between Terminal 2 and Mall of America from July through early October for maintenance and construction. A bus bridge served this segment.

Phase III – August-December

In the second half of 2022, the workforce shortage continued, resulting in minor reductions in the summer and fall. Unfortunately, the reliability of service continued to decline, with additional reductions in October and December 2022 resulting in the lowest level of service operated since the pandemic began.

- In August, LRT service was reduced to every 15 minutes. Limited service on Commuter Route 467 was restored.
- In October, two more routes (27, 831) were suspended, and service on five routes was reduced to every two hours.
- In December, there was an 8% reduction in service around the region.
  - Two more routes were suspended on weekdays (115, 547), and two more on weekends (534, 804 Sunday).
  - Service was restructured/suspended on eight routes.
  - Frequency was reduced on 37 routes, including 11 commuter routes and Orange Line during weekday midday.
  - The D Line opened, mostly replacing service on other local routes in the Emerson/Fremont and Chicago Avenue corridors.

Figure 3 shows the weekday service availability by stop in December 2022.
Looking Ahead: Changes Beyond 2022

Service changes in 2023 are highly dependent on Metro Transit’s ability to hire enough operators and support staff to compensate for attrition and grow the workforce. The workforce situation started to improve in 2023, and modest service improvements were made in June and August 2023. Metro Transit’s Network Now project is the process to identify service changes and improvements through 2027 in light of new transitways and significant changes in travel patterns and transit demand. In the meantime, the following working guidelines are being used for service planning decisions between 2023 and mid-2024, when the Network Now plan will be completed:

- Maintain service reliability so that all scheduled trips operate.
- Build on success by improving frequency on the routes with the highest ridership or where ridership is growing quickly.
- Prioritize access for those who rely on transit the most, including lower-income groups and communities of color.
- Prepare for transitways under construction or planning to open in 2025.
- Consider customer input.
- Prioritize routes where riders have no or few alternatives.
- Balance network frequency and coverage improvements.
2022 Ridership Trends and Distribution

As shown in Figure 4, daily ridership generally trended upward from December 2021 through October 2022. Over time, ridership is typically seasonal and cyclical, where systemwide ridership tends to be higher in spring and fall compared to winter. Universal Pass launched at the University of Minnesota, providing expanded transit access to students beginning that fall. As the year ended, ridership contracted on all modes except BRT, demonstrating the combined impacts of seasonal ridership fluctuations, significant service reductions, and the launch of METRO D Line.

Throughout 2022, METRO BRT had the steadiest ridership growth; LRT ridership gained net ridership; and local and commuter route ridership changed marginally overall.
As in 2021, ridership in 2022 continued to be concentrated in major local and METRO corridors and at regional destinations and transfer points (Figure 5).

**Title VI Service Equity Analysis**

The Federal Transit Administration (FTA) requires transit agencies to show that they are not discriminating against communities of color and lower-income groups when providing transit service. This analysis is known as a Title VI Service Equity Analysis (SEA). This document includes a summary of the methodology and results, and the full report is available online.

The SEA reviewed Metro Transit’s service changes from December 2021 to December 2022 to understand how service availability – or access to transit – may have changed for residents and the extent to which impacts differed between Black, Indigenous, and people of color (BIPOC) and White non-Hispanic residents, and between low-income and non-low-income residents. Per FTA guidance in the Title VI Circular, Metro Transit’s Title VI work refers to all non-White, non-Hispanic persons as BIPOC rather than breaking down the analysis any further to separate out communities of color by specific race.
Framework for Evaluating Impacts

Consistent with Metro Transit’s Title VI Policy, the impact of service changes is measured by the change in service availability – or access to transit. Put another way, the analysis quantifies how much transit service is within a reasonable walk or roll from one’s home, and how that has changed. This is measured by the number of weekly scheduled transit trips (count of trips from public route schedules) available to each census block and the people that live within it. The SEA reviewed the extent to which the percent change in scheduled transit trips differs between Black, Indigenous, and people of color (BIPOC) residents and white non-Hispanic residents, and between low-income residents and non-low-income residents.

Following FTA guidelines, Metro Transit uses a threshold to determine when differences are significant enough to result in potential discrimination. “Disparate impact” refers to race discrimination, while “disproportionate burden” refers to income discrimination. In 2022, the Metropolitan Council updated “DI/DB” policy to redefine disparate impact and disproportionate burden as a difference greater than ten percent. If adverse or beneficial effects of service changes borne by BIPOC or low-income groups are not within ten percent of the effects borne by White or non-low-income groups (respectively), then the changes would pose a potential disparate impact or disproportionate burden. Council policy does not consider a beneficial effect beyond ten percent difference to BIPOC and low-income populations as evidence of potential discrimination.

Scenarios

The SEA explored the potential for discrimination resulting from cumulative 2022 service changes under two scenarios:

1. Three-year Change (September 2019 to December 2022): Measuring changes in access to transit service since before the COVID-19 pandemic.
2. One-year Change (December 2021 to December 2022): Measuring changes in access to transit service when schedules were adjusted due to the operator shortage and the opening of D Line.

Data

Figure 6 and Figure 7 show the geographic distribution of BIPOC and White residents, and low-income and non-low-income residents, respectively, in areas served by Metro Transit bus or rail service.

These demographic data are then linked with the service data from September 2019, December 2021, and December 2022 to understand the extent to which the magnitude of service changes varied between different groups. Figure 8 and Figure 9 show the change in weekly scheduled trips available in residential areas. These maps show the underlying variation in the direction (increase or decrease) and magnitude (small or large) of the service changes. Areas with no residents and places not served by fixed routes are not shown on the maps, as these do not affect the results.
Figure 6. Residents Served by Metro Transit Fixed Routes: BIPOC Populations, ACS 2017-2021
Figure 7. Residents Served by Metro Transit Fixed Route: Low-Income Populations, ACS 2017-2021
Figure 8. Percent Change in Service by Census Block: September 2019 to December 2022
Results

Three-Year Change (September 2019 to December 2022)

In December 2022 compared to September 2019, the average resident served by Metro Transit experienced a 24.6% decrease in the number of weekly scheduled trips near their home (Figure 10). The average White non-Hispanic resident experienced a decrease of 29.6%, and the average non-low-income resident experienced a decrease of 27.1%. Meanwhile, BIPOC and low-income
residents respectively experienced a 17.2% and 17.9% decrease in available service. These results indicate no disparate impact on BIPOC residents and no disproportionate burden on low-income residents due to service changes between September 2019 and December 2022.

![Figure 10. Average Percent Change in Access to Transit Service: September 2019 to December 2022](image)

One-Year Change (December 2021 to December 2022)

In December 2022 compared to December 2021, the average resident served by Metro Transit experienced a 9.6% decrease in the number of weekly scheduled trips near their home (Figure 11). The average White non-Hispanic resident experienced a decrease of 13.0%, and the average non-low-income resident experienced a decrease of 11.2%. Meanwhile, BIPOC and low-income residents respectively experienced 4.8% and 5.8% decreases in available service. These results indicate no disparate impact on BIPOC residents and no disproportionate burden on low-income residents due to service changes in 2022. Though facing significant workforce challenges in 2022, Metro Transit protected BIPOC and low-income communities from larger effects of service reductions, in alignment with the agency’s equity goals and our guiding principle to minimize impacts on these groups.
2022 Service Metrics, Disaggregated by Race

Service metrics quantify how communities experience transit service at their stops. This approach considers who benefits from service and how transit connects people to opportunities. Reporting performance, disaggregated by race, is one of the ways Metro Transit demonstrates a commitment to equity and transparency. This practice helps to identify areas where White non-Hispanic residents may be experiencing higher quality service compared to BIPOC residents.

Service Metric Principles

Core Metrics

A core set of metrics establish the foundation for historical review and transparency. Metro Transit measures the following core metrics every year using the same methodology and consistent data sources:

- Service availability (count of scheduled trips),
- Service utility (access to frequent service and jobs), and
- Service reliability (on-time performance, cut trips).

These metrics help convey the volume and utility of provided service. Metro Transit customers are more likely to choose transit where and when it connects with destinations regularly and reliably.
Replicability

Methodology is documented, repeatable, and consistent over time. Sources include the U.S. Census American Community Survey (ACS, five-year rolling average) for demographic data and established service databases for performance data. Metro Transit prioritizes consistent methodology when reporting so trends are measurable and analyses are repeatable. The methodology for each metric and data source is described in the Appendix.

Service Availability

Count of Scheduled Trips

The count of scheduled trips is an indicator of how much service is expected to be available. Typically, residents living near a stop with one hundred trips available are more likely to ride transit compared to residents living near a stop with only a couple of trips available. Although transit supply does not wholly predict transit ridership, it is necessary to build demand.

![Figure 12. Average Number of Trips Available to the Population, Disaggregated by Race, Fall 2022](image)

As shown in Figure 12, in 2022 Native American, Black, and Hispanic residents had more trips available at a nearby stop, on average, compared to White non-Hispanic residents. There was no difference between trips available to Asian and White non-Hispanic residents. The region remains highly segregated, and there is often a high demand for service in areas serving Black and Native American residents. The count of scheduled trips helps describe who could potentially benefit from transit service, but it does not account for the utility of the service to communities.
**Service Utility**

**Access to Frequent Service**

A transit route that serves stops at least four times per hour, on average, weekdays and Saturdays is considered frequent service (i.e., “high frequency”). Frequent service supports flexible and easy travel. When service becomes very frequent, customers do not need to carefully plan around a transit schedule, the service is more useful, and it becomes more likely that service can replace single-occupancy auto trips. One way to quantify service utility is to measure the proportion of the population that can reasonably walk or roll to frequent service.

![Access to High-Frequency Service](image)

*Figure 13. Percent of Population with Access to High-Frequency Service, Disaggregated by Race, Fall 2022*

As shown in Figure 13, Native American and Black residents were most likely in 2022 to have access to high frequency service nearby. High-frequency service through racially segregated areas leads to significant differences in access to frequent service among racial groups. All disaggregated BIPOC populations on average have greater access to high-frequency service compared to White non-Hispanic residents.

**Job Accessibility**

Job accessibility measures how many jobs can be reached within a reasonable travel time. It is an important measure of the utility of transit. Transit is designed to connect community with opportunity—whether that is a job, education, health care, or social connections. Job density is often a proxy for activity and community resources. Therefore, job accessibility is one way to understand residents’ opportunities to connect to important destinations in the region.
Jobs are concentrated in the downtowns of Minneapolis and St. Paul. The downtowns are also historically the focal points of the transit network, where many transitways and local and commuter services converge. These combined factors result in significant differences in job accessibility via transit across the region. In this analysis, a job is considered accessible if it can be reached by transit within 45 minutes. Figure 14 illustrates that living near the downtowns and within walking distance of high-frequency service provided the most access to jobs in 2022, a proxy for the residents’ opportunities to connect to important destinations in the region. As shown in Figure 15, more jobs in 2022 were accessible by transit, on average, to BIPOC residents compared to White non-Hispanic residents.
Figure 15. Weekday-Midday Access to Jobs by Race/Ethnicity for Fall 2022

Service Reliability

Several metrics are used to understand the transit system’s reliability: on-time performance, cut trips, and the percent of scheduled service delivered.

On-Time Performance

On-time performance is the percent of buses and trains that depart a stop on-time according to the transit schedule (a threshold of up to five minutes late or one minute early); it is a common approach to estimating service reliability.
Similar to previous years, transit service in 2022 was less reliable (i.e., less likely to be on-time) for Native American and Black populations because these population groups were more likely to live near stops that have less reliable service (Figure 16).

### Cut Trips and Percent Service Delivered

A cut trip represents the most severe form of unreliability and has a greater impact on customers than a late bus or train. During Fall 2022, there were more than 50 trips cut, on average, for residents living near transit. Black and Native American residents were more likely to live near stops with cut trips compared to other racial groups (Figure 17) in part because they have the highest levels of service.

When faced with a shortage of drivers on a given day, Metro Transit dispatchers cancel specific trips. In an effort to minimize the impacts, dispatchers prioritize maintaining service where there are few alternatives for impacted riders, whether via alternative routes or alternative trips. In practice, this often results in reducing service on the highest frequency routes where more customer alternatives are scheduled, either on adjacent routes or adjacent trips on a route schedule. Service is preserved on routes with fewer trips and fewer alternative routes, such as low frequency local and express routes where cutting a trip would introduce a gap in service of an hour or more. While well-intended, these guidelines result in most cuts occurring on high-frequency routes. Since high-frequency routes serve a higher proportion of BIPOC communities than other route types, cut trips disproportionately affect communities of color.
Although trips serving Black and Native American residents were more likely to be cut in 2022, the percent of service delivered was generally high in 2022 across all racial/ethnic groups. The differences in percent service delivered among racial/ethnic groups was also relatively small. Compared to 2021, transit service was less likely to be cut in 2022 (Figure 18).

![Figure 17. Cut Trip Count, Disaggregated by Race, Fall 2022](image1)

![Figure 18. Percent Service Delivery Near Residents, Disaggregated by Race, Fall 2021 and Fall 2022.](image2)
Cutting trips is inconvenient for riders, especially if they are already at their stop expecting a bus that will not arrive. For those with time-sensitive travel plans, access to less frequent service, and/or limited travel mode options, making alternative arrangements may be costly, time-consuming, or impossible. Metro Transit staff work to minimize adverse impacts of trip cuts by prioritizing the delivery of certain services such as school trips or routes with fewer alternatives.

Although the percent of cut service is very small and the difference across racial groups is also small, Metro Transit is dedicated to eliminating cut service in every location. In 2021, Metro Transit attempted to right-size schedules to better meet operator availability, but the persistence of the operator shortage required significant service reductions again in 2022 to further mitigate cut trips and reliability impacts. Prior to the pandemic and severe workforce shortages, cut trips were an anomaly and happened so infrequently it was not regularly reported. Metro Transit’s goal is for cut trips to be a highly unusual occurrence.

**Current Equity Practices in Service Planning**

Metro Transit incorporates equity in all aspects of transit service planning, ranging from individual route-level service changes to corridor-level projects and Title VI anti-discrimination work required by the FTA.

**Title VI Program**

Title VI is just one aspect of Metro Transit’s equity work, but it is an important part of complying with federal requirements for transit agencies. The Metropolitan Council has a [Title VI Program](#), which is required by the Federal Transit Administration (FTA) and must be updated every three years. The Council approved the latest Title VI Program in late 2022, including changes to Disparate Impact and Disproportionate Burden Policy and Service Equity Analysis (SEA) methodology.

**Disparate Impact and Disproportionate Burden (DI/BD) Policy**

Following FTA guidelines, Metro Transit uses a threshold to determine when differences are significant enough to result in potential discrimination. “Disparate impact” refers to race discrimination, while “disproportionate burden” refers to income discrimination. Prior to 2022, the Council used a threshold of twenty percent to identify whether a proposed fare change, major service change, or triennial monitoring review shows evidence of potential discrimination. In 2022, the Metropolitan Council updated DI/DB policy to redefine disparate impact and disproportionate burden as a difference greater than ten percent. If adverse or beneficial effects of service changes borne by BIPOC or low-income groups are not within ten percent of the effects borne by White or non-low-income groups (respectively), then the changes would pose a potential disparate impact or disproportionate burden. Council policy does not consider a beneficial effect beyond ten percent difference to BIPOC and low-income populations as evidence of potential discrimination. This change was subject to a public comment period, where 17 agencies and individuals provided feedback supportive of the new policy.
**Service Equity Analysis (SEA) Methodology Review**

In 2021 Metro Transit began an in-depth review of the methodology used to perform a SEA. This work included reviewing how peer transit agencies conduct SEAs, measure transit access and define important concepts such as “poverty”, “major service change” and “threshold for disparate impact or disproportionate burden.” As a result of this work, Metro Transit has modified the increased the amount used to determine poverty as 185% of the federal poverty level, has started using the street network to determine reasonable walk or roll distance to transit, and is now incorporating actual rider data to supplement U.S. Census data when possible. These changes were formally approved by the Council in 2022 as part of the Title VI Plan update.

**Service Monitoring Study**

The service monitoring study is one element of the Council’s Title VI Program. Every three years most transit agencies must review six performance standards and design guidelines to see how well they meet these standards in communities of color and/or in low-income areas as compared to the rest of the system. Last conducted in 2021, the study showed no concerns with potential for disparate impact or disproportionate burden. The study results were approved by the Metropolitan Council in January 2022, prior to updates to DI/DB Policy in late 2022. The next monitoring study will be completed in 2024.

**METRO D Line & Local Service Changes**

A Service Equity Analysis (SEA) was done because the D Line and changes to routes in the BRT corridor (39, 133, 721 and 724 south of Brooklyn Center Transit Center) met the agency’s definition of a major service change. Specifically, this analysis reviewed the extent to which the percent change in weekly scheduled transit trips differs between Black, Indigenous, and people of color (BIPOC) residents and white non-Hispanic residents, and between low-income residents and non-low-income residents. The study showed no potential for disparate impact or disproportionate burden resulting from these proposed changes. The results of the analysis were shared with the Metropolitan Council in August 2022 and approved.

**December 2022 Service Changes**

An SEA was completed for all service changes proposed for December 2022, which included the opening of D Line as well as service reductions and suspensions affecting dozens of routes. This analysis reviewed Metro Transit’s service changes to understand how service availability—or access to transit—may change for residents and the extent to which impacts differ between BIPOC and white non-Hispanic residents, and between low-income and non-low-income residents. The analysis concluded that there was no potential for disparate impact or disproportionate burden.

**Routine Practices**

Equity is also reflected in Metro Transit’s guiding equity principles, ongoing updates of the network improvement plan (in progress), and day-to-day decisions and processes.
**Transit Equity Statement**

In 2022, Metro Transit adopted a Transit Equity statement, which was drafted by the Equity & Inclusion team and includes feedback from employees throughout Metro Transit. This statement guides the tangible steps Metro Transit is taking to be more equitable and inclusive within the organization and community.

Metro Transit acknowledges that providing safe, affordable, and reliable transportation increases opportunity. Transit services and programs should be built to equitably benefit all, especially under-served communities, including BIPOC, low-wealth, women, people with disabilities, LGBTQ, youth and older adults. Transit equity requires identifying and addressing injustices and building actionable pathways to create a fair and more just future.

Metro Transit understands that transit decisions can impact the ability of under-served communities to find and keep jobs, reach medical care, access educational opportunities and affordable housing, and develop and maintain social connections, among other impacts. Transit services and investments can reduce spatial inequalities that contribute to racial, environmental, and economic disparities.

Metro Transit has an essential role and responsibility to examine all decisions impacting our region’s access to quality transit, reduce existing disparities, and prevent further inequities by:

- Reviewing and revising policies
- Seeking partnerships with other responsible institutions; and
- Improving planning and operational practices

**Network Now**

Network Now is a systemwide project that started in 2022, although the public-facing work didn’t happen until early 2023. It establishes Metro Transit’s priorities over the next four years. This plan will recognize the changes to the region’s transit network that have occurred since 2019, build on the success of regional transitways and BRT networks advanced in Network Next, and guide how Metro Transit will invest in service through 2027. Strategies to promote equity will be woven throughout the Network Now process, in particular, through engagement, data analysis, and service improvement evaluation. One of the Network Now principles introduced in Fall 2023 is directly related to equity and overcoming regional disparities: Prioritize access for those who rely on transit the most, including lower-income groups and communities of color.

**Customer Surveys**

It is important to ensure that feedback is collected from a representative cross-section of the public so that the needs of traditionally under-represented populations are heard. When doing survey work, responses are analyzed to make sure that there is fair representation from the demographic groups most likely to ride transit. If it appears that a group is under-represented, staff makes extra effort to “meet our riders where they are.”

The Travel Behavior Inventory project was updated in 2022. This on-board survey provides important data at the route level about how, when, where, and why people travel on the region’s
buses and trains. The survey also shows who takes transit to make sure the transit system works in an equitable way for everyone who uses it. More information is available on the Met Council website at metrocouncil.org/Transportation/Performance/Travel-Behavior-Inventory/Transit-On-Board-Survey.aspx.

**Prioritizing Speed and Reliability Improvements**

Metro Transit’s Speed and Reliability projects are designed to make transit faster and more reliable, which are key factors to attracting customers. Projects may include transit advantages (bus-only lanes, traffic signal priority that extends a green light at key locations) and other strategies such as combining bus stops, improving stop facilities, and simplifying routes to make transit more attractive. Along with other evaluation factors, priority is given to improvements that serve areas with high percentages of BIPOC residents, low-income residents, and renters, as well as larger numbers of low wage jobs. A related initiative is known as “Better Bus Routes”, and two of these projects were worked on in 2022, on routes 17 and 22. More information is available on the Metro Transit website at metrotransit.org/speed-reliability.
Appendix

Methodology for Disaggregating Performance by Race

To determine community racial demographics, Metro Transit estimates the population that can access a transit stop by walking to it within 10 minutes (the ‘walk-shed’). Next, the walk-shed is compared to the U.S. Census block-group geographies. The analysis scales the population of each race in each census block-group by the area of the block-group within the walk-shed. For example, if half of a block-group A is in a walkshed and block-group A contains 40 White residents and 60 Black residents, then block-group A contributes half of those residents to the walk-shed, or 20 White residents and 30 Black residents. All contributions of each Census block-group within the walk-shed are combined to get the total number of residents of each race who are within walking distance of the transit stop.

Performance data is assigned at the transit stop. For example, the on-time performance of a stop is calculated by summing the total number of ‘on-time’ vehicles departing that stop over the total number of vehicles departing that stop. The performance at that stop is associated with the community living near that stop. This calculates ‘population-weighted’ performance. If there are many people living near a stop that has 80% on-time performance, it has more impact on the community and the performance than if only a few people live near a stop with 90% on-time performance.