



Paratransit Study

Phase One: Existing Conditions

April 2024



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INTRODUCTION

Under the Americans with Disabilities Act (ADA), public transit agencies that provide fixed-route service are required to provide complementary paratransit for individuals whose disabilities prevent their use of fixed-route. NFTA-Metro's complementary paratransit service, Paratransit Access Line (PAL), serves this function in the Buffalo-Niagara Falls region.

This report presents a comprehensive assessment of the current PAL service, a key deliverable of the NFTA-Metro Paratransit Comprehensive Analysis and Service Expansion Evaluation study. NFTA-Metro engaged a consultant team led by Nelson\Nygaard Consulting Associates, Inc. (consultant team or team) to undertake this study.

REPORT ORGANIZATION

The report is organized as follows. Section 1 describes how NFTA-Metro is organized, and which divisions are responsible for elements of PAL service. Section 2 compares PAL service policies with ADA requirements. Section 3 covers ADA paratransit eligibility. Section 4 provides information about the number of riders, trips provided, and other operating and performance statistics. Section 5 examines operational practices, with particular emphasis on the PAL operations control center. Section 6 describes resources used to provide the service, including personnel, fleet, technology, and financial (budget and operating expenses). Section 7 explains the process NFTA established to obtain input on the study during this initial phase and describes the process NFTA uses to record, investigate, and resolve rider complaints.

SAMPLE DATA

NFTA-Metro provided the consultant team with data from the month of April 2023. This report refers to sample data for the month, for the week of April 16–22, 2023, and for specific days during that week.

KEY DOCUMENTS

This report references several important documents that NFTA-METRO provided to the team as well as regulatory materials. The following documents are referred to with the shortened names throughout the report:

- PAL Rider's Guide (Draft Winter 2022) Rider Guide
- PAL Policy and Procedure Manual 2023 Policy and Procedure Manual
- ADA Eligibility Application Eligibility Application
- U.S. DOT Americans with Disabilities Act (ADA) Regulations ADA regulations
- Federal Transit Administration (FTA) ADA Circular ADA Circular

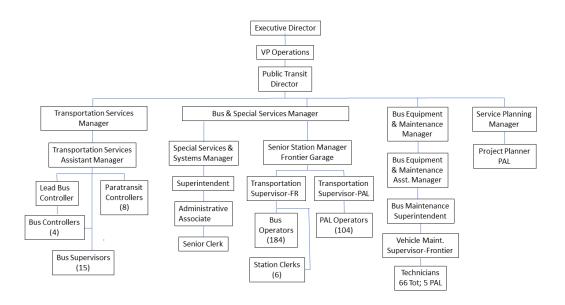
1 ORGANIZATION AND MANAGEMENT

NFTA-Metro operates PAL service fully in-house and across several divisions of the Public Transit Department, which falls under NFTA's Vice President of Operations and the Director of Public Transit.

PAL OPERATIONS

Four divisions share responsibility for PAL (Transportation Services, Bus & Special Services, Bus & Equipment Maintenance, and Service Planning). See Figure 1.

Figure 1 PAL Organizational Structure



NFTA-Metro departments that also support PAL include Customer Service, Human Resources, Risk Management, ITS, Customer Relations, Public Affairs, Engineering, Legal, and HSEQ (Health, Safety, Environment, and Quality).

Eligibility and PAL Customer Service

The Manager of Special Services within the Bus and Special Services Division oversees eligibility determination, customer service, and certain management and operations functions. She reports to the division manager and supervises three team members. Eligibility-related tasks include initial determinations, recertifications, and management of the PAL rider no-show suspension process. Customer service functions include taking general information calls, managing contacts with and notifications to riders, assisting riders with using the PAL service—such as using the IVR or online reservations services—and managing the PAL complaint and customer comment process. Management and operations functions include taking and approving requests for PAL subscription service, managing subscription changes, overseeing the scheduling and dispatching software system, reviewing the run structure, monitoring telephone performance statistics, performing service delivery data analysis, and developing PAL brochures, public information, and ADA training materials. See Section 3 and Section 5.

Control Center

The PAL control center is part of the Transportation Services Division, led by the Manager of Transportation Services and the Assistant Manager of Transportation Services. The control center oversees trip reservations, trip scheduling and run management. At the time of the site visit there were seven PAL controllers, with an eighth position authorized and in the process of being filled. The manager overseeing the PAL control center also supervises fixed-route bus controllers and road supervisors. At the time of the site visit, there were 14 supervisors, all supervisors were shared between both modes. Also see Section 5-1.

Bus Operations

PAL service is operated out of the Frontier Garage, one of the three garages used to provide fixed-route bus service. The Bus & Special Services division manages garage operations. A senior station manager reports to the Manager of Bus & Special Services and oversees two transportation supervisors—one for fixed-route service and one for PAL service. The PAL transportation supervisor oversees PAL operators (90 at the time of the site visit with another 14 positions authorized but not filled). The fixed-route transportation supervisor at the Frontier Garage oversees 184 bus operators and five station clerks. Also see Section 5.

Vehicle Maintenance

The Bus Equipment & Maintenance Division oversees both PAL and fixed-route maintenance. Maintenance supervisors at each garage report to a superintendent, assistant manager, and

division manager. At the Frontier Garage, where PAL vehicles are maintained, there are 66 union technicians who report to a supervisor, five of whom work on PAL vehicles. Also see Section 5.

Service Planning

The Service Planning Division conducts various short- and long-term planning studies for METRO, including this PAL study. Metro hired a project planner to assist with this study.

OTHER NFTA-METRO DEPARTMENTS

Other departments within NFTA also support PAL service and include Human Resources, Risk Management, ITS, and Public Affairs. A vice president typically manages these departments. ITS is a separate NFTA department and while ITS supports PAL, particularly related to the use of Trapeze software, NFTA does not dedicate an ITS staff member to PAL support.

PAL MANAGEMENT RESPONSIBILITIES

Certain individuals in supervisory roles oversee PAL functions separately from similar fixed-route functions. For example, a transportation supervisor based at the Frontier Garage oversees PAL operators. Similarly, staff within Special Services & Systems perform PAL eligibility, customer service, and management functions.

Other supervisors have shared responsibility for PAL and fixed-route service. For example, the Assistant Manager of Transportation Services manages both fixed-route and PAL controllers as well as the road supervisors shared among both services. Similarly, vehicle maintenance supervisors have responsibility for technicians working on fixed-route buses as well as PAL vehicles.

Advantages of Current Structure

The following are the advantages of the current structure:

- It spreads responsibility for PAL operation among several departments and divisions, which is the same for both PAL and for fixed-route service.
- Managers have joint responsibility for fixed-route and PAL service through the control center, through road supervision, and through a shared garage.
- During the first three years of employment, both PAL and fixed-route operators receive the same compensation (see Section 6).

Disadvantages of Current Structure

The following are the advantages of the current structure:

- No single department manager can maintain a "big picture" perspective and consider any interrelated issues.
- If PAL demand grows or the availability of vehicle operators becomes an issue, it can be difficult to track and report these changes and seek additional resources.
- Sharing resources such as mechanics or road supervision can leave PAL service with insufficient support. The 15 road supervisors are shared with fixed route.
- Paratransit operations are unique and require specialized management experience, particularly when working with customers. Supervisors of paratransit service need to ensure control center staff are sufficiently trained for this role.
- The joint labor contract has led to PAL operators receiving the same compensation as fixed-route operators for the first three years of employment, however, top rate compensation is not equal between fixed route and PAL.
- Paratransit scheduling and run management tools also differ from fixed-route software requiring special training and skills.
- Certain fixed-route functions such as customer service can operate independently but
 work better when integrated into paratransit. This includes responding to calls about
 late rides, rider no-shows, managing subscription service, and managing trip
 eligibility. Issues specific to PAL are discussed later in this report.

2 SERVICE POLICIES

Following are the key policies that define the PAL service with references to the ADA regulations and the FTA ADA Circular¹, a guidance document for transit agencies on properly implementing compliant service. Each policy also describes NFTA-Metro's current policy.

SERVICE AREA

The ADA regulations require that PAL-type service (referred to as complementary paratransit service) be provided in all areas served by non-commuter fixed-route bus and rail service. At a minimum, service must be provided to all areas that are within 3/4 mile of non-commuter bus routes and 3/4 mile of all non-commuter rail stations. This minimum distance is determined "as the crow flies" rather than by street miles. Relatively small areas that are surrounded by bus routes must also be served as part of the "core service area."

Commuter bus and rail service is exempted from the complementary paratransit service requirement. This includes traditional commuter service such as peak services to and from a central business district, as well as service that has a "limited stops and limited route structure."

As required, NFTA-Metro provides PAL service within 3/4 mile of non-commuter fixed-route bus and rail service. During weekday morning and afternoon peak periods, NFTA-Metro exceeds the ADA requirements by also providing PAL service within 3/4 mile of its express bus routes, shown in Figure 2.

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¹ https://www.transit.dot.gov/regulations-and-guidance/fta-circular-47101-americans-disabilities-act-guidance

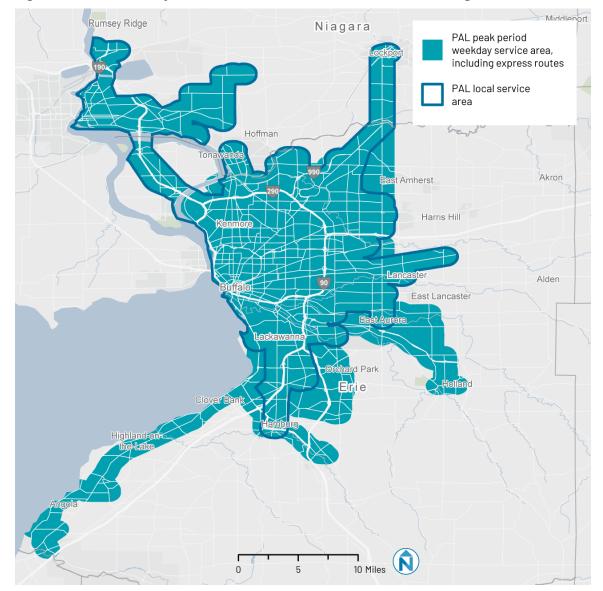


Figure 2 PAL Weekday Peak Period Service Area (Maximum Coverage)

DAYS AND HOURS OF SERVICE

The ADA regulations require provision of PAL-type service, at a minimum, during all hours that non-commuter fixed-route bus and rail service is operated. NFTA-Metro meets this minimum requirement. PAL service hours vary, depending on the fixed-route hours in that area. Figure 3 shows the weekday PAL service area between 9:30 a.m. and 2:30 p.m. Figure 4 shows the service area on weekday evenings. Figure 5 shows the service area during the day on Saturdays and Figure 6 shows the service during the day on Sundays. Each map also shows the maximum service area that includes express routes.

Varying PAL service hours by corridor can make the service difficult to understand and use. Riders typically do not consult fixed-route timetables before planning trips and requesting trips. Instead, they typically make plans and request trips and may then discover the times they want to travel are outside the service hours.

Customer Feedback

During the December 2023 public meetings, some participants stated they did not understand the service area and asked that better information be made available to riders.

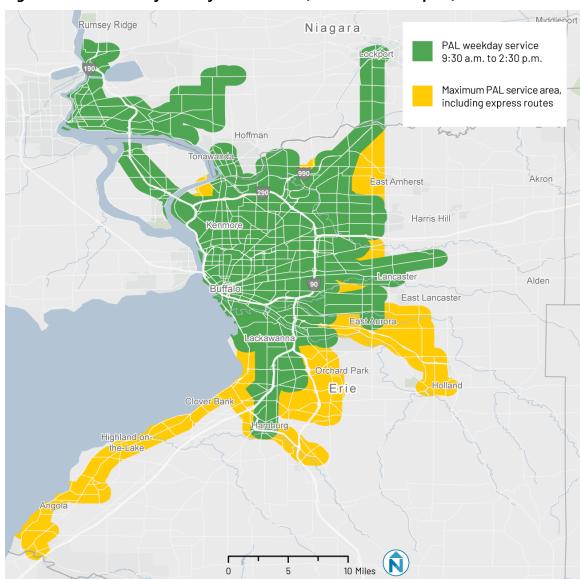


Figure 3 PAL Weekday Midday Service Area (9:30 a.m. to 2:30 p.m.)

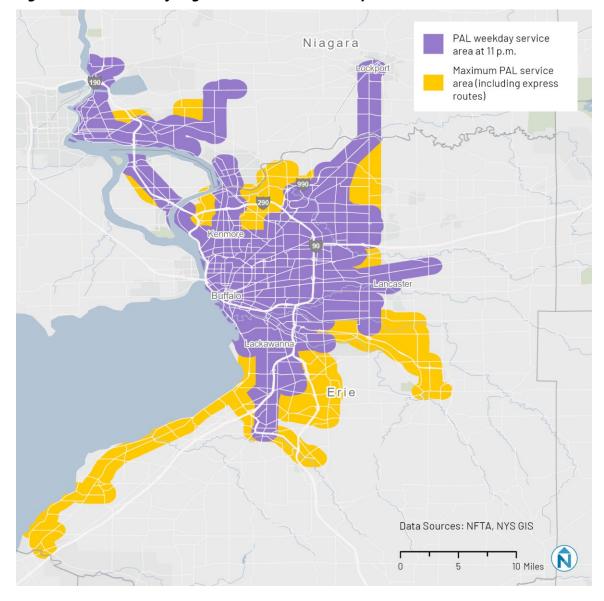


Figure 4 PAL Weekday Night Service Area After 11 p.m.

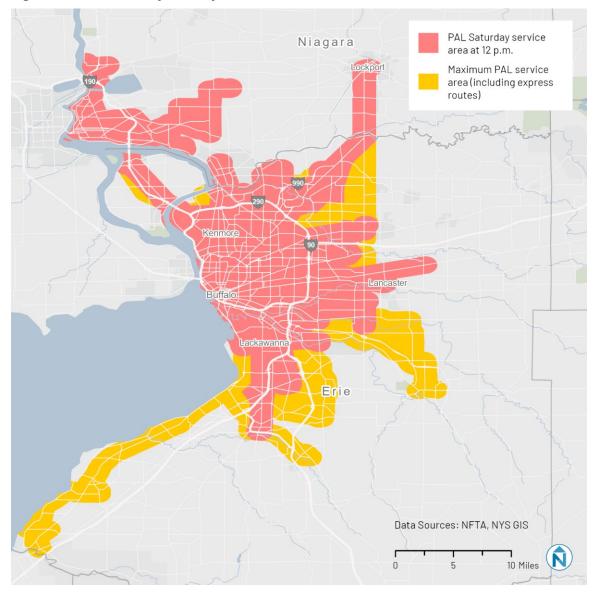


Figure 5 PAL Saturday Midday Service Area

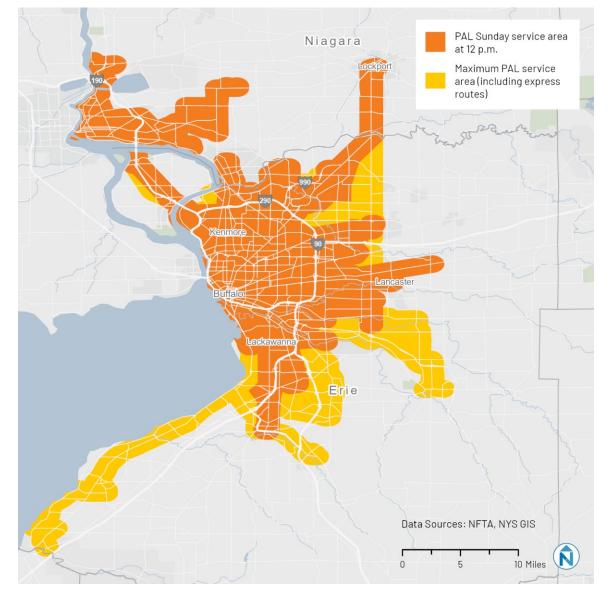


Figure 6 PAL Sunday Midday Service Area

TRIP RESERVATION POLICIES

The ADA regulations require that PAL-type service be provided on a "next-day" basis. This means that eligible riders must be able to request trips up to the close of the reservation hours for trips on the following day. Reservations must be accepted during "normal business hours" on all days that precede a day of service. The number of days in advance that reservations are accepted is not specified and is a local option.

The ADA regulations also allow negotiation of trip times within one hour before and one hour after requested pickup times. According to the ADA Circular, negotiations must be done

in a way that meets underlying trip needs. For example, if a rider requests a 5:15 p.m. pickup at the end of their workday, it would not be acceptable to offer a 4:15 p.m. pickup that would require leaving work early. Similarly, if a rider requests an 8 a.m. pickup to get to a 9 a.m. doctor's appointment, it would not be acceptable to offer a 9 a.m. pickup that would clearly not get the rider to their appointment on time. In general, the ADA Circular suggests that the one-hour negotiation window be applied before the requested time for "going" trips, and after the requested time for "return" trips.

NFTA-Metro's PAL service allows trip reservations up to 14 days in advance. Trip requests are accepted seven days a week from 8 a.m. to 8 p.m. Requests for trips on the following day must be placed by 4 p.m. to allow schedulers to create final schedules. Requests for trips made two to 14 days in advance are accepted up to 8 p.m. By taking trip requests up to 8 p.m., NFTA-Metro exceeds the minimum ADA requirements.

It is also NFTA-Metro's policy to negotiate trip times to improve trip grouping and scheduling efficiency. The Rider's Guide informs riders that times may be offered that are up to one hour different from the times they request.

FARES

The maximum fare that can be charged to eligible riders of PAL-type services is twice the fare that would be charged for the same trip on a fixed route. The standard, non-discounted fixed-route fare is used for comparison. Discounts available with passes or for certain riders are not considered. If there are multiple ways that the same trip could be made on fixed route, the option that would most likely be taken by riders applies.

PCAs accompanying eligible riders are not to be charged a fare. Companions (not acting as PCAs) can be charged the same fare as the eligible rider.

While fares paid by riders can be no more than twice the comparable fixed-route fare, the ADA regulations permit transit agencies to arrange with human service agencies and to receive payments from those agencies for "agency trips" – trips provided to clients of the agencies.

The current per-trip PAL fare is \$4. For the most part, this is twice the standard (non-discounted) bus and rail fare of \$2.

Between Fountain Plaza Station and the Canalside area, Metro Rail operates above ground and is fare free. Accordingly, any PAL trips that begin and end within 3/4 of a mile of the above-ground Metro Rail stations must also be fare free. According to the ADA Circular, "In cases where complementary paratransit riders are traveling between origins and destinations that are both within 3/4 mile of a zero-fare route, and the typical fixed route user would make use of this zero-fare route to make a comparable trip, applying the § 37.131(c)

maximum fare provisions means the complementary paratransit fare for this trip is also zero."²

Consistent with ADA requirements, there is no fare for attendants who ride with eligible PAL riders, and companions pay the same fare as the eligible riders. To be consistent with fixed-route fare policy, NFTA-Metro also allows up to three children accompanying eligible PAL riders to ride for free.

PAL fares are currently paid either in cash or with multiride passes. NFTA-Metro has recently moved to an account-based fare system (MetGo) for both fixed-route service and PAL

TRIP PURPOSES

The ADA regulations require that PAL-type service be provided for all types of trips, regardless of the trip purpose. There can also be no prioritization of trips by trip purpose in the reservations, scheduling, or dispatching processes. NFTA-Metro provides PAL service for all trip purposes and does not prioritize trips based on purpose.

Eligible riders may use the service for any purpose even if an alternative service is available to them. NFTA-Metro can negotiate with other agencies to seek reimbursement for eligible trips and can inform riders about other transportation options and even assist them with applying for such options, but cannot restrict eligible riders from riding PAL.

SUBSCRIPTION SERVICE

The ADA regulations permit but do not require transit agencies to offer subscription service. If agencies choose to offer subscription service, certain requirements apply. If the service is capacity constrained, subscription service cannot be more than 50% of the total trips provided during any hour of the day. Transit agencies can set policies for subscription service locally if such trips represent 50% or less of all trips each hour. The regulations permit subscription service to be limited to certain types of trips and permit use of waiting lists for subscription service.

Almost all transit agencies providing complementary paratransit allow riders to request and receive subscription service. Providing trips on a subscription basis reduces the number of phone calls that must be handled, as riders do not need to request trips each day. Providing trips on a subscription basis is also efficient, as these trips can be grouped and set on schedules in an efficient way with other trips then filled in around them.

² See Circular page 8-17

PAL riders can request subscription service for any trips made at least once each week from the same pickup and drop-off locations at the same time of day. NFTA-Metro requires riders to have established a pattern during the prior 14 days and reviews and approves such requests on a case-by-case basis. Factors considered include vehicle availability and whether the trip can be efficiently placed on existing schedules. NFTA-Metro places requests it cannot immediately approve on a waiting list.

If the locations or times of subscription trips change, riders must notify NFTA-Metro, which reconsiders the request. Subscription trips can be placed on "hold" for up to 30 days if riders are on vacation or for other reasons. If a rider is a no-show for three successive days, subscription benefits can be revoked.

In FY 2023, subscription trips accounted for 24% of all trips by PAL eligible riders. The team analyzed subscription trips by hour for a sample weekday of Wednesday, April 19, 2023, with particular focus on times when most workshop trips took place (7-10 a.m. and 1:30-4 p.m.). During these peak workshop hours, subscription trips accounted for 29% of all trips.

NFTA-Metro manages the number of approved subscription trips to ensure that they do not exceed 50% of trips provided for all hours of the day. This approach aligns with the ADA subscription trip requirements.

RIDER ASSISTANCE

The ADA regulations require PAL-type services to be "origin-to-destination" in design. This means vehicle operators must assist riders beyond the vehicle, if needed, to enable eligible riders to get from their pickup address (origin) to their drop-off address (destination). The ADA Circular explains that such assistance is to be provided to and from the exterior doors of pickup and drop-off locations, but operators are not required to enter buildings. Operators should offer an arm for guidance or stability but are not required to lift riders in any way. Operators should assist riders who use manual wheelchairs by pushing the wheelchair as needed but are not required to operate power wheelchairs.

Assistance should be provided except when doing so poses a threat to the operator or other passengers. For example, pushing a manual wheelchair over minor cracks and obstacles should be done, but attempting to assist someone over a very rough pathway or through significant snow could be seen as a threat to the operator's safety. Similarly, operators may assist a rider and briefly lose sight of the vehicle but are not required to do so if they cannot maintain effective continuing control of the vehicle.

PAL's Origin-Destination Service Policy

NFTA-Metro has designed PAL service to be origin-to-destination. Operators are required to provide reasonable assistance beyond the vehicle as needed and requested. NFTA-Metro's policy appropriately considers the health and safety of operators and other passengers and other aspects of the ADA Circular.

The need for assistance is considered as part of the PAL eligibility process. If assistance is regularly needed, NFTA-Metro adds this information to the rider's record so that it will be shown on run manifests each time the rider is served. If not established as part of initial eligibility, riders can also ask for assistance when making a trip reservation or can ask operators for assistance on the day of service. This flexibility is included in the policy since rider needs can change.

Dead-End Streets Policy

NFTA-Metro restricts PAL service on certain dead-end streets, so operators do not have to make multipoint turns or use private driveways. Road supervisors inspect the streets in question to determine whether a street needs to be restricted from PAL service. PAL staff add unusable streets to a running and note this information in the scheduling software. Of the 23 streets that road supervisors had examined, 21 were dead-end streets that PAL vehicles could not navigate. This relatively small number of examined streets appears reasonable.

ATTENDANTS AND COMPANIONS

The ADA regulations require transit agencies to accommodate a rider's attendants and companions. Attendants are defined as those who assist riders during transport or at their destination. Companions are people traveling with eligible riders. One attendant must always be accommodated at no fare. Companions pay the same fare as the rider and at least one companion, in addition to the attendant, must be accommodated. Additional companions should be served on a space available basis.

NFTA-Metro's attendant and companion policy is ADA complaint. The Rider's Guide correctly defines attendants and companions and indicates that they are accommodated. The eligibility determination process considers the need for an attendant. NFTA-Metro notes the need for an attendant based on information in the application. Riders can contact NFTA-Metro at any time during their term of eligibility to have their record updated to include the need for an attendant.

ACCOMMODATION OF MOBILITY DEVICES

The 1990 ADA defined a "common wheelchair" as any three- or four-wheeled device used for mobility by people with disabilities that did not exceed 30 inches wide, 48 inches long, and did not weigh more than 600 pounds when occupied. The ADA regulations now reflect dimension and weight limits corresponding to the evolution in vehicles and lifts. Wheelchair lift platforms are now commonly 31-32 inches wide, 50-52 inches long, and can accommodate weights of 800 pounds or more. The regulations require PAL-type services to accommodate mobility devices up to the design limits of the vehicles and equipment being used. The term common wheelchair and its definition were eliminated.

The Policy and Procedure Manual correctly indicates that the regulations only require the accommodation of riders who use wheelchairs if vehicles and lifts can do so safely. Based on the design of current PAL vehicles, the manual sets the maximum size of mobility devices that can be safely accommodated at 30 inches wide, 48 inches long and 800 pounds when occupied. The manual then states that "In the event a mobility aid exceeds the definition of a common wheelchair it will be recommended that a rider travel using an alternate mobility aid or travel with a PCA (attendant) who can operate your device while you ride the lift separately. Please note that under no circumstances are Operators allowed to operate mobility aids."

Customer Feedback

Based on the team's review of customer complaints and 2021 survey (see Section 7) and based on feedback received during the December 2023 public meetings, PAL operators may need refresher training on securing mobility devices.

SERVICE CAPACITY

Because access to PAL service is considered a civil right under ADA, constraints on access to the service are not allowed. Types of possible capacity constraints addressed by the ADA regulations include trip caps, waiting lists, trip denials, missed trips, poor on-time performance, excessively long ride times, and long telephone hold times. Following is a discussion of each.

Trip Caps

There can be no trip caps for PAL-type service. These might include a limit on the number of trips that can be taken per day or per month. NFTA-Metro does not use trip caps. Eligible

riders can request and take as many trips as they need within the defined service area at the times the service is operated.

NFTA-Metro uses a 90-minute minimum between two same-day PAL trips (time between first drop-off of and time of pickup for the subsequent trip). The ADA regulations allow trip requests negotiations of up to 60 minutes, and as such, trip requests 60 minutes apart are permissible.

Waiting Lists

There can be no waiting lists for non-subscription service. Waiting lists are allowed for subscription service, but if subscription status is not provided, riders must be able to request and make the trip on a non-subscription basis. NFTA-Metro has a waiting list for subscription PAL service but does not use waiting lists for non-subscription service.

Trip Denials

The ADA regulations prohibit a pattern or practice of denying a substantial number of trips on PAL-type services. The FTA ADA Circular suggests that transit agencies have a goal of meeting 100% of paratransit demand and having no trip denials. Any denials should be singular events and represent a low percentage of all trip requests. The ADA Circular states

- Trips negotiated to a time more than one hour from the requested time should be recorded as denials even if provided.
- Two trip denials should be recorded if a rider requests a round trip, one leg of the trip is accommodated but the other cannot be scheduled, and the rider chooses to not take the one-way trip offered.

NFTA-Metro's goal is to have no trip denials. Pre-pandemic, only one trip denial was recorded in FY 2019 and one in FY 2020. In FY 2021 and 2022, when demand fell considerably, no trip denials were recorded. In FY 2023 demand returned and grew further. With a shortage of operators, PAL recorded 38 trip denials, approximately less than one per week.

The consultant team examined trip records for April 2023 and found no trip denials. The records included limited codes for some common situations related to not accommodating trip requests. For example, there were no codes for trips not accommodated because the request was outside the service area or outside the hours of operation. Similarly, the team did not find trip requests that were accommodated but the rider chose not to accept the valid scheduling time offered. In these instances, it appears that PAL controllers are not entering these details and saving the trip request. See trip reservations in Section 5 for an additional discussion of trip coding.

Missed Trips

The ADA regulations consider PAL-type services to be capacity constrained if there is a pattern or practice of a substantial number of missed trips. The ADA Circular explains that trips are missed if vehicles arrive late (past the on-time window), and riders do not take the trip—either are not there or elect not to go. Trips can also be missed if vehicles arrive early and riders do not make the trip because they are not yet ready to go. Missed trips should be a small percentage of all trips scheduled—typically no more than ½ of 1% of all scheduled trips.

The Policy and Procedure Manual missed trip section discusses rider no-shows and late cancellations. Situations where trips are not taken due to vehicles arriving early or late are not addressed.

While not in the manual, PAL staff expressed some confusion about the difference between rider no-shows and system missed trips. April trip records indicated that some trips were coded as missed, suggesting some understanding. The team believes that trips may not be properly coded as missed, including some trips that were actually "cancel at door" or "no-show" trips. Customer service staff who track rider no-shows routinely check vehicle arrival times so as not to incorrectly charge riders with no-shows and change records if they notice an incorrect initial coding of trips by controllers.

Service records indicate a varying number of missed trips in recent years. In FY 2019 and FY 2020, missed trips ranged from 316 to 472 per year, or about 0.2% of trips scheduled, reflecting good performance. In FY 2021, which included the first year of the pandemic, missed trips fell to only 41, well under 0.1 percent. In FY 2022, as operator shortages were encountered, missed trips rose to 927, or just under 0.5 percent. Similarly, in FY 2023, there were 1,180 missed trips recorded, about 0.6% of all trips scheduled. Over the FY 2019-2023 timeframe reviewed, the number of missed trips has increased each year but the percentage remained relatively low.

On-time Performance

The ADA regulations also consider PAL-type services to be capacity constrained if there is a pattern or practice of a substantial number of untimely pickups or drop-offs. The ADA Circular suggests that transit agencies establish windows within which pickups and drop-offs are considered timely. It suggests that agencies also establish standards and goals for acceptable on-time performance—for both pickups and drop-offs.

NFTA-Metro uses a -15/+15 window for PAL pickups. This means pickups are considered on time if made from 15 minutes before to 15 minutes after the scheduled time. PAL uses a - 30/0 window for drop-offs, meaning drop-offs are on time if they take place from 30 minutes

before and up to the appointment time. Staff indicated that NFTA-Metro has adopted a goal of 95% for its OTP.

The Rider's Guide includes information about the pickup window. The Policy and Procedure Manual does not include any information on on-time performance (OTP).

As detailed in Section 4, OTP for pickups has varied significantly before, during and since the pandemic. Prior to the pandemic, OTP was 90% or higher. Most recently, OTP has been about 81 percent, well below NFTA-Metro's goal.

NFTA-Metro does not track or report drop-off OTP. The team's observations, detailed in Section 5, also indicate that controllers are not consistently recording appointment times during the trip booking process. The absence of this data prevents determination of OTP for drop-offs.

Ride Times

A pattern or practice of a substantial number of trips with excessively long ride times is also considered a type of noncompliant capacity constraint. The ADA Circular notes that paratransit ride times should be comparable to times required to make the same trip on fixed route. When comparing fixed-route and paratransit ride times, it is acceptable to consider the time it takes to walk to and from fixed-route stops as well as any time spent waiting to transfer between connecting fixed routes. Paratransit ride times are not considered excessively long if they are similar (i.e., within about 15 minutes) of total time required to use fixed route.

Ride times are addressed in the Travel Time section of the Policy and Procedure Manual, correctly stating that paratransit and fixed-route ride times should be comparable. It also correctly describes how to compare trips between modes. NFTA-Metro staff indicated ride time maximums are configured within the trip scheduling software. NFTA-Metro has not set a goal for ride time performance and does regularly monitor paratransit ride times.

PAL ride times are typically not contained in monthly or annual performance reports. To get a sense of ride times, the team examined trip data for the week of April 16-22. Figure 7 summarizes ride time data for that month. As shown, 88% of trips were completed in less than one hour.

Figure 7 PAL Travel Time Analysis, April 16–22, 2023

Travel Time	Trips	Percent
Less than 0 minutes	3	0%
0 minutes	39	1%
1-15 minutes	888	23%

Travel Time	Trips	Percent
16-30 minutes	1,190	30%
31-45 minutes	813	21%
46-60 minutes	537	14%
More than 60 minutes	472	12%
Total	3,942	100%

The team examined the 472 trips (12%) that exceeded one hour of ride time. Of these, 401 trips were completed in 90 minutes or less, while 71 took longer, including ten exceeding 2 hours and one taking 3 hours and 4 minutes.

Approximately 60% of trips exceeding 1 hour were trips to/from workshops. Of the 282 workshop trips taking more than an hour, 120 had direct distances of less than 10 miles and had predicted direct travel times of less than 25 minutes. It is likely that when grouping some workshop trips, riders who are the first to board when going to the workshop and last to get off when leaving are experiencing longer trips than the same trips would take had they not been grouped.

Of the 190 non-workshop trips with on-board ride times of more than 60 minutes, 79 (42 percent) had direct distances of less than 10 miles with predicted direct travel times of less than 25 minutes.

Travel times of 60 minutes or less on PAL-type services are reasonable—even for mid-length or shorter trips. Using fixed-route buses or trains involves walking to and from bus stops or stations, which can take 10-15 minutes at either end. So even average length trips of 5 to 10 miles involve at least one hour when walking time is considered.

To determine how longer trips (over 60 minutes ride time) compared to travel by fixed route, the team examined a sample of 30 long trips. Using the NFTA-Metro fixed-route trip planner, the team identified options for making these trips on the same day and at the same time by bus or rail and included an allowance for walking time to and from fixed-route stops or stations. This analysis found that:

- Five trips had no solution in the trip planner, suggesting that they could not be made by fixed route at the times requested.
- 13 of the 30 sample trips (43 percent) took longer by fixed route than by paratransit.
- 12 of the 30 (40 percent) took longer by paratransit than by fixed route.
- Of the 12 that took longer by paratransit, seven (23% of the total sample of 30) were more than 15 minutes longer and could be considered "significantly" longer.
- Of the seven paratransit trips that were significantly longer, four were workshop trips and three were non-workshop trips.

Given that the analysis suggested that 12% of all trips took more than 60 minutes, and that 23% of the trips over 60 minutes were significantly longer than fixed route, it can be estimated that about 3% of all paratransit trips take significantly longer than similar trips made on fixed route, while 97% take a comparable or less time.

Telephone Hold Times

A final type of possible capacity constraint is long telephone hold times. Riders can be discouraged from using the service if they are not able to easily get through on the phone to make trip reservations or to check on late rides.

FTA guidance regarding telephone hold times suggests that transit agencies track telephone hold times by hour of the day and set a goal/standard for hold time performance. It is suggested that the goal/standard use maximum rather than average hold times. For example, an appropriate standard might be to answer 95% of calls within five minutes.

NFTA-Metro's telephone system captures reporting on hold times and provides detailed information about call volume, calls answered, average as well as maximum hold times, servicing time, and other data.

NFTA-Metro has not established a formal hold time goal/standard and has not addressed hold times in the PAL Policy and Procedure Manual.

The team reviewed hold times for the week of May 1-7, 2023, by day and by hour. On weekdays, peak call times were 8–9 a.m. and 2–4 p.m. Call volume sometimes increased from 12 to 1 p.m. On Saturday, the peak time for calls was 9–10 a.m. On Sunday, calls took place between 10 a.m. and 4 p.m.

In general, hold times for the week were not excessive. Even during high-volume times, staff answered 40-60% of calls in 60 seconds and maximum hold times were 5 minutes or less. Average hourly hold times were typically under 30 seconds and during peaks hours were under one minute.

On Sunday, however—particularly in the afternoon—hold times were slightly longer. Between 40 and 80% of calls were on hold for more than 60 seconds, the average hourly hold times ranged from 30 to 40 seconds, and the longest holds were about 6 minutes.

Reports appear to document combined hold times for all types of calls. Staff could not confirm whether it was possible to generate separate reports for reservation calls versus other types of calls—such as calls about late rides. Because the telephone system is designed to jump late ride calls ahead of others, it is possible that reservation calls have longer hold times than late ride calls.

3 **ELIGIBILITY**

The ADA regulations require that transit agencies that provide ADA paratransit service also have a process in place for determining who is "ADA Paratransit Eligible." The regulations define specific eligibility criteria. To keep ADA paratransit sustainable, the regulations require that the eligibility process "strictly limit" eligibility to individuals who meet these criteria.

To be eligible for paratransit service, individuals must have a disability that prevents them from using fixed route transit service some or all the time. They might not be able to get to and from the fixed route stops they need to use, might not be able to board or ride a fixed route vehicle, or might not be able to understand how to use fixed-route service, or navigate the system. The regulations define "prevent" to mean using fixed-route service would require an unreasonable level of effort or risk.

APPLICATION PROCESS

NFTA-Metro has a nine-page application form. Individuals can call the customer service number (766-855-7268) and request a form via mail. They can also download the form from the NFTA-Metro website or obtain a copy at the transportation center at 181 Ellicott Street.

Part 1

The application form has two parts. Applicants or caregivers must complete Part 1 (four pages). It asks for general information (name, address, phone number, etc.); information about disability(ies) and how the applicant is prevented from using fixed-route service, mobility aids used, whether assistance from another person is needed when traveling outside the home, information about current travel, and use of fixed-route service. It asks about specific mobility skills needed to use fixed-route service, such as walking distances, waiting outside unassisted, and depositing a fare, and how weather conditions impact these things. It also invites applicants to attach additional information that supports their claim of not being able to use fixed-route service. Finally, it requests that applicants enclose a recent photograph to make a paratransit ID card if determined eligible.

Part 2

A medical or rehabilitation professional must complete Part 2 of the application. NFTA-Metro instructs applicants to forward the application to a professional to have this part completed. NFTA-Metro limits who can complete Part 2 to the following:

- Physical or occupational therapist
- Certified rehabilitation counselor
- Licensed social worker
- Certified case manager Commission for Case Manager Certification (CCMC)
- Physiatrist physical medicine & rehabilitation (PM&R)
- Orientation & mobility specialist
- Qualified intellectual disability professional (QIDP)

Part 2 asks professionals if they are currently treating the applicant, for specific information about the disability(ies) that prevent use of fixed-route service, whether the disability is permanent or temporary, and whether the applicant can perform certain tasks needed to use fixed-route services. It also asks them to indicate the types of mobility aids/devices used by the applicant. If the applicant uses a wheelchair or scooter, NFTA-Metro asks the professional to provide the length and width of the wheelchair ("measured two inches above the ground") and the combined weight of the wheelchair and applicant.

Part 2 also paraphrases the regulatory criteria that define eligibility and asks the professional to indicate whether the applicant meets either of these criteria. It asks the professional to read what the applicant has written in Part 1 and whether they agree with what the applicant has said about their abilities. It also asks the professional to describe in their own way why the applicant is not able to use fixed-route services.

Completed Applications

Applicants must send completed application forms to the PAL customer service office. Staff confirms the application is complete. If authorizations, signatures, or key information is missing, staff return the forms for completion. If minor information is missing, staff follow up with applicants by phone.

Staff attempts to make all decisions within 21 days of receiving a completed application. If it takes longer to do so, NFTA-Metro provides presumptive eligibility until it makes a final decision.

The Superintendent of Special Services makes eligibility determinations. She reviews all application forms, makes follow-up contacts as needed with applicants and treating professionals, and prepares determination letters. Other staff in the office provide

administrative support, such as sending out application forms when requested, sending out determination letters, and returning incomplete applications.

TYPES OF ELIGIBILITY GRANTED

Based on the information provided in the application form, additional attached documentation, and information obtained in follow-up calls with applicants and/or professionals, staff make determinations of eligibility. NFTA-Metro grants one of the following types of eligibility:

- Unconditional Eligibility NFTA-Metro grants this type of eligibility if staff feel that applicants cannot be expected to make any trips on the fixed-route service.
- <u>Conditional Eligibility</u> NFTA-Metro grants this type of eligibility if there are specific
 conditions that prevent applicants from using fixed-route service and that fixed-route
 service can be used if these conditions do not exist.

If applicants' abilities are not expected to change significantly, NFTA-Metro grants full-term eligibility, which is for three years. If a temporary condition is described in the application material, temporary eligibility is granted with an expiration date that is consistent with the prognosis. Both unconditional and conditional eligibility can be either full term or temporary.

NFTA-Metro grants one or more of the following types of conditions:

- Winter Only Applicants who receive this type of conditional eligibility can use PAL service from November through April each year. They are considered able to use fixed-route service from May through October.
- Conditional 1 Applicants are given this type of eligibility if the determination is that they qualify under the first regulatory criteria, which is that they cannot independently navigate the fixed-route service. The actual wording in determination letters is "You are approved conditionally for Paratransit service under Section 1 of the Americans with Disabilities Act where you are unable, due to an impairment related condition, to independently ride an accessible fixed route vehicle."
- Conditional 3 Applicants are given this type of eligibility if the determination is that they qualify under the third regulatory criterion, which is that they cannot get to or from bus stops or train stations. The wording in determination letters is "You are approved conditionally for paratransit service under Section 3 of the Americans with Disabilities Act. You may use PAL for trips when you are unable, due to an impairment-related condition to travel the distance to or from the bus stop or station. You may use PAL for trips when environmental conditions (lack of sidewalks in area from the corner of the street to the nearest bus stop) prevents safe travel."

NFTA-Metro grants conditional eligibility that includes one, two or all three of these conditions. For example, a rider who cannot use fixed route for any trips in winter months and also cannot sometimes safely get to or from bus stops at other times of the year will be granted "Winter Only" and "Conditional 3" eligibility.

The final part of the determination is whether applicants can be accompanied by PCAs at no extra charge. If the information in the application indicates that they sometimes travel with a PCA, the determination letter will state "We have noted in your rider file that you sometimes travel with a personal care attendant (PCA). Your PCA may accompany you at no additional charge." If the information in the application does not indicate use of a PCA, this allowance is not included in the rider file, and riders cannot claim a PCA when booking a trip. However, riders can contact PAL Customer Service, indicate a change in need, and then have PCA added to the file.

DETERMINATION LETTERS

The ADA regulations require written documentation of ADA paratransit eligibility determinations. Letters sent to applicants found eligible must contain six pieces of information: the name of the applicant, the name of the transit agency making the certification, a contact name and phone number at the transit agency where eligibility can be verified, any conditions of eligibility, including whether the applicant is authorized to bring a PCA at no fare, and an eligibility expiration date.

Letters denying eligibility must provide specific reasons for the denial. This must be more than a general statement that the applicant "can use fixed-route service."

Any determinations that limit eligibility in any way (i.e., conditional or temporary) must indicate that applicants have the right to appeal and must provide information on how to initiate an appeal.

NFTA-Metro letters granting eligibility contain the required information. Letters are sent on NFTA-Metro letterhead, are addressed to the applicants, and specifically indicate ADA Paratransit Eligibility. The letters also provide an expiration date and describe any conditions placed on eligibility. All letters are signed by the Superintendent Manager of Special Services and Systems, who makes the determinations. Letters include the PAL customer service phone for follow-up questions.

Letters informing applicants that they are not eligible contain specific reasons for the denial, indicate the right to appeal, and have the appeal policy and process for initiating appeals attached. Letters that find applicants only conditionally eligible or eligible for only temporary service also provide appeal information.

ELIGIBILITY STATISTICS AND DETERMINATION OUTCOMES

Figure 8 lists the number of PAL riders and eligibility determination statistics for the five-year period from FY 2019 through FY 2023. Total registered riders peaked in FY 2019 at 5,594 and remained steady in FY 2020. During the pandemic, the number of riders dropped to 5,034 in FY 2021 and to 4,753 in FY 2022. The number of riders has continued to decline. As of March 31, 2023, there were 4,560 total registered riders.

Figure 8 PAL Riders and Eligibility Determination Statistics, FY 2019–2023

	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Registered riders	5,594	5,461	5,034	4,753	4,560
Recertified riders	694	638	629	627	666
New registered riders	819	793	348	547	560
New unconditional	431	423	242	348	378
New conditional	388	370	139	199	182
Denied	11	5	7	11	8

In FY 2023, customer service staff received and processed 1,469 applications, or about 122 per month. Of these, 132 (about 9 percent) were incomplete and returned to the applicants. A total of 560 new applicants were determined eligible in FY 2023. Another 666 existing riders reapplied and were recertified. Of the 560 new riders, 378 (68 percent) were determined to be unconditionally eligible and 182 (32 percent) were found to be conditionally eligible. Only eight applicants were found to be not eligible in FY 2023. This rate of eligibility denials is consistent with other transit agencies.

Figure 9 depicts new and recertified PAL riders by year and the number determined unconditionally versus conditionally eligible. Pre-pandemic, there were about 800 new applicants. This dropped off dramatically during the pandemic, falling as low as 348 new applicants in FY 2022. Since then, the number of new riders has increased to about 550 per year but remains below pre-pandemic figures.

The number of existing riders applying for recertification remained relatively constant throughout, falling only slightly during the pandemic and returning to about the same number post-pandemic.

The percentage of applicants determined unconditional versus conditional has changed somewhat. Pre-pandemic, about 53% of new applicants were found unconditionally eligible, while about 47% were conditionally eligible. Post-pandemic, 68% of applicants were found unconditionally eligible and 32% were found to be conditionally eligible.

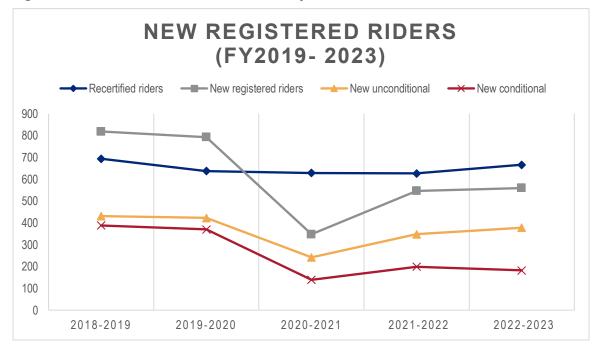


Figure 9 New and Recertified PAL Riders by Year, FY 2019-2023

RECERTIFICATION

The ADA regulations allow transit agencies to limit the term of eligibility and require periodic recertification. The regulation states that requiring recertification every year would be considered burdensome and that a three-year term is reasonable. The transit industry standard is to provide eligibility for between three and five years.

NFTA-Metro grants full term PAL eligibility for applicants who do not have temporary disabilities for three years. NFTA-Metro grants shorter periods of temporary eligibility, depending on the expected length of disability indicated in the application material or obtained subsequently.

APPEAL PROCESS

The ADA regulations have an eligibility appeal process and inform applicants of the right to appeal when eligibility is limited in any way (i.e., conditional or temporary). The appeal process must meet the following requirements:

- Requests for appeals must be accepted for at least 60 days following the initial decision.
- Appellants must have the opportunity to be heard in-person and to present additional information.

- There must be a "separation of function" between those hearing appeals and those making the initial determination.
- Decisions must be rendered within 30 days of the appeal hearing. Service must be provided if the decision takes longer than this.
- Decisions must be in writing.

NFTA-Metro's Paratransit Access Line Administrative Appeal Process document explains the appeal steps. The process is also described in the PAL Rider's Guide.

When NFTA-Metro sends letters of determination to applicants found not eligible or conditionally eligible, the letters inform them of their right to appeal and include a copy of the administrative appeals process.

The current process appears to meet the regulatory requirements. The process summary indicates that appeals are available to applicants found not eligible or only conditionally eligible. Staff also noted that—while not stated in the written process summary—information about the right to appeal is included in letters to applicants given temporary rather than full-term eligibility. The written process summary also notes that appeals can be requested for up to 60 days following the initial determination, and that appeals are heard in-person. It indicates that written appeal decisions are sent within 30 days and service is provided if the decision takes longer than 30 days.

Staff indicated that appeals are heard by a three-person panel that includes:

- NFTA-Metro's occupational health nurse who is in the human resources department
- A lawyer from NFTA-Metro's legal department
- A representative from a local disability organization

None of the appeal panel members are involved in the initial eligibility determination, thus providing the required separation of function.

NFTA-Metro receives very few requests for eligibility appeals. Only four requests have been received between FY 2019 and FY 2023.

VISITOR ELIGIBILITY

The ADA regulations require transit agencies to provide paratransit service to visitors. A visitor is defined as someone who lives outside the transit agency's jurisdiction. Service is to be provided if:

- The visitor has been granted eligibility by another transit agency and can provide documentation of such eligibility.
- The visitor has not been determined eligible by another agency but indicates having a disability. If the indicated disability is "apparent" (e.g., person uses a wheelchair or is

blind and uses a dog guide), service is to be provided without requiring documentation of disability. If the indicated disability is not "apparent" the transit agency may request documentation of disability.

FTA guidance on serving visitors suggests that a broad range of reasonable types of documentation of disability should be accepted if the stated disability is not apparent. Individuals should not be required to complete applications for eligibility.

Visitors are granted up to 21 days of service in a rolling 365-day period. If visitors need to use the paratransit service more frequently, they can be required to go through the standard ADA Paratransit Eligibility process.

FTA guidance suggests that the process for taking and deciding requests for visitor service should be timely. Individuals should be able to contract transit agencies and have visitor eligibility approved in a matter of a day or two—assuming they provide required information in a timely way.

The PAL Policy and Procedure Manual (2023) contains a section on visitors. The PAL Rider's Guide (2022 draft) also has a section titled "Visitor Eligibility Status." Information about visitor service is also provided on the Special Services/Paratransit page of the NFTA-Metro website. All three descriptions of visitor service correctly indicate how individuals can qualify for visitor service. The Policy and Procedure Manual noted that visitors must reside outside of the NFTA-Metro jurisdiction—this important piece of information is missing in the Rider's Guide and the online information, although both address "visitors to the area."

All three descriptions of visitor service also appropriately identify required documentation. Individuals who have been determined eligible by another transit agency just need to provide documentation of their eligibility. Those without existing eligibility who indicate apparent disabilities are only required to provide proof of residence (to prove they live outside the NFTA-Metro area). Those who indicate non-apparent disabilities are asked to provide "documentation of health condition or disability." In practice, a broad range of types of documentation are accepted.

The PAL Rider's Guide and online information appropriately indicate service is provided for "any combination of 21 days within a 365-day period." Both the Rider's Guide and the information online instruct visitors to contact PAL Customer Service prior to their visit by either calling 716-855-7268 or e-mailing PALfeedback@nfta.com. Customer service staff confirmed that visitor eligibility is processed within a day or two of receipt of required information.

NO-SHOW SUSPENSION POLICY

Section 37.125 of the ADA regulations includes the provision that transit agencies "may establish an administrative process to suspend, for a reasonable period of time, the provision of complementary paratransit service to ADA-eligible individuals who establish a pattern or practice of missing scheduled trips [no shows]." Before suspensions are imposed, a two-stage appeal process is required. Riders must be given an opportunity to challenge the no-shows recorded against them (either as incorrect or as being outside their control). Following this first-level review and before any suspension can be implemented, riders must have an opportunity to appeal the suspension to an independent authority. An opportunity to appeal in person must be provided for a formal appeal.

FTA guidance on no-show suspension policies suggest that:

- Cancellations made so close to the scheduled pickup that the time cannot be
 effectively used for other trips (e.g., less than 2 hours before the scheduled pickup
 time) can be counted as a type of no-show.
- Transit agencies should correctly define no-shows and late cancelations and ensure trips were not missed because vehicles did not arrive on time.
- When determining whether a pattern or practice of missing trips exists, transit agencies should consider not only the absolute number of no shows, but the frequency of rider no shows. FTA has suggested that rider no shows should be much higher than the system average (perhaps two to three times higher) to be considered a pattern or practice.
- Suspensions should be on the order of one to two weeks, with the longest suspensions for repeat violations not exceeding 30 days.

NFTA-Metro's no-show policy is explained in the missed trip policy section of the PAL Rider's Guide. The policy closely follows FTA guidance. No-shows are correctly defined as only occurring when vehicles arrive within the 30-minute pickup window and riders are given at least five minutes to board, which staff verifies before confirming. The policy indicates that riders are not charged with no-shows beyond their control. Riders notified of charged no-shows are given ten days to question the no-show(s) and submit information indicating why they feel the charge is incorrect or was beyond their control.

The NFTA-Metro policy establishes a sliding scale to determine if the number of no-shows is a pattern or practice. NFTA-Metro reviews a rider's trip history each month and imposes a suspension if:

 The rider schedules from one to 20 trips in the month and no-shows or late cancels two or more

- The rider schedules between 21 and 30 trips in the month and no-shows or late cancels three or more
- The rider schedules 31 or more trips in the month and no-shows or late cancels 10% or more

While this sliding scale appropriately considers frequency of use and sets a percentage several times the system average for no-shows and late cancels, it can lead to suspensions that do not rise to the level of a pattern. For example, a rider who uses the service 20 times in a month who no-shows both legs of one scheduled round-trip could face a possible suspension.

The NFTA-Metro policy considers a rider's extended history to determine the appropriate response. If the violation is the first in six months, NFTA-Metro sends a warning, but does not suspend them. If the violation is the second in the past six months, NFTA-Metro imposes a three-day suspension. For the third violation, the suspension is for seven days, and a fifteen-day suspension is imposed for a fourth violation. The maximum suspension is 30 days for five or six violations in the past six months.

In practice, customer service staff send riders postcards each time they are recorded as having a no-show or late cancel. The postcards indicate the date and time of the no-show or late cancel and inform riders that they can contact NFTA-Metro if they feel the incident was recorded incorrectly or was beyond their control. To challenge a recorded no-show/late cancel, riders must send in a written explanation and provide supporting information. They must do this within 10 days; customer service responds in writing with a decision on whether the no-show/late cancel was removed.

When proposing a suspension, NFTA-Metro informs riders of the right to appeal. The same staff who hear eligibility appeals also hear and decide suspension appeals.

The PAL service has a relatively low rate of no-shows and late cancels. In FY 2023, there were only 2,474 customer no-shows and 1,691 late cancels for 209,265 scheduled trips. This is only 2%. Based on prior transit agency research, a no-show/late cancel rate of less than 3% is considered good.

4 SERVICE STATISTICS & PERFORMANCE

This section provides information about the number and type of PAL trips provided, vehicle hours and miles, and other service data. Also provided are measures of performance, including productivity (trips per vehicle-revenue-hour) for the five-year period from FY 2019 through FY 2023.

RIDERSHIP

Figure 10 shows total PAL ridership for FY 2019 through FY 2023. Figure 12 provides a breakdown of total ridership into trips by registered riders, PCAs, and companions.

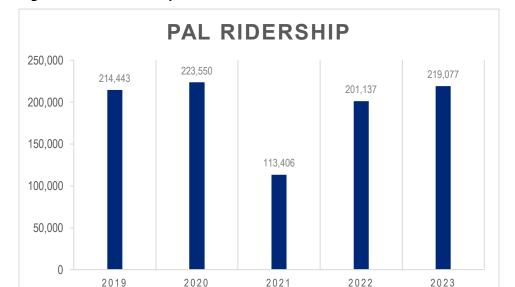


Figure 10 PAL Ridership, FY 2019-2023

Ridership varied considerably during this period. In FY 2019, 214,513 one-way trips were taken. Ridership peaked in FY 2020 at 223,735 total trips. During the first year of the pandemic ridership fell by 49% to 113,406 trips. It rebounded to 201,299 in FY 2022 and 219,169 in FY 2023. By the end of FY 2023, total monthly ridership was at and beginning to exceed pre-pandemic levels.

Weekend ridership is considerably lower than weekday ridership. The FY 2022 Metro Performance Report indicates that average weekday ridership was 719 trips in FY 2022. Average Saturday ridership was 161 trips, 22% of weekday ridership. Average Sunday ridership was 101 trips, only 14% of weekday ridership. This is not typical of other transit

agencies where Saturday ridership is typically about half of weekday levels and Sunday ridership is typically about a third of weekday levels.

Before the pandemic, trips with personal care attendants (PCAs) accounted for between 4.9 and 5.3% of all trips. Since then, PCA trips have fallen to between 3.6 and 3.9% of total trips. Trips by companions also declined. Pre-pandemic, companions made up 1.2 to 1.4% of all trips. Since then, companion trips have decreased to only 0.9% of all trips provided. These rates are low compared to other transit agencies, possibly due to the high percentage of workshop trips on PAL service.

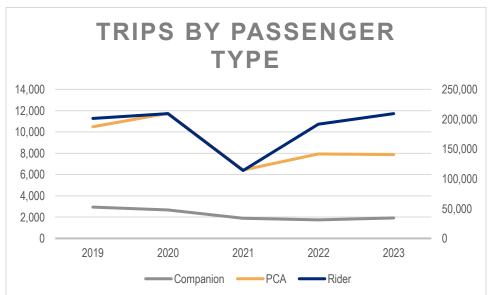


Figure 11 PAL Trips by Passenger Type, FY 2019–2023

Subscription Trips

Figure 12 shows the number and percentage of total registered rider trips provided on a subscription basis. Monthly and annual PAL service reports indicate that subscription service made up a little over 1/3 of all registered rider trips prior to the pandemic. This fell to only 22% in FY 2021 as many local agencies suspended in-person services. In FY 2022, subscription trips increased to 29% of all registered rider trips but declined to 24% in FY 2023.

Figure 12 PAL Registered Rider and Subscription Trips, FY 2019–2023

	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Registered rider trips	201,004	209,136	105,089	191,457	209,284
Subscription trips	71,114	75,790	23,014	56,445	49,897
Percent	35%	36%	22%	29%	24%

Group Trips

Riders going to and from work training and supported employment represent a large share of PAL trips. Figure 13 shows the number and percentage of trips provided to the eight main workshops that use PAL service. Together, clients of these eight programs account for 41% of all PAL trips. Clients of three of the programs—TriMain, Southeast Works, and People, Inc.—account for 33% of all trips.

Figure 13 PAL Group Program Trips (April 16–22, 2023)

Agency	Trips	Percent of All Trips
TriMain	678	12%
Southeast Works	606	11%
People, Inc.	534	10%
The Arc	148	3%
Starlight	112	2%
Via (Blind)	98	2%
Aspire	44	1%
Canisius YALT	34	1%
Total	2,254	41%

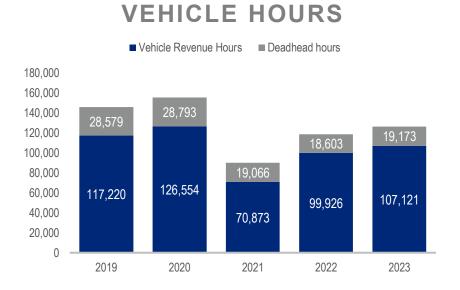
Trips By Riders Who Use Wheelchairs

In FY 2023, 12% of all trips provided on PAL were taken by riders who use wheelchairs (25,775 of 219,169). This is relatively low compared to other transit agencies where trips by riders who use wheelchairs typically comprise 15 to 20% of all trips. The high percentage of PAL workshop trips is a possible explanation.

TOTAL VEHICLE HOURS AND VEHICLE-REVENUE HOURS

Figure 14 shows total PAL vehicle hours, vehicle-revenue hours, and deadhead hours operated from FY 2019 through FY 2023. Total vehicle hours operated peaked in FY 2020 at 155,347. Eighty-one percent of these hours were revenue hours and 19% were deadhead hours. During the first year of the pandemic (FY 2021), total vehicle hours dropped to 89,939, while deadhead hours remained relatively unchanged at 21 percent. In FY 2022, total vehicle hours increased to 118,529, and in FY 2023 increased further to 126,293. Post-pandemic, deadhead hours have decreased to only 15 to 16% of the total.

Figure 14 Vehicle-Revenue Hours and Deadhead Hours, FY 2019–2023



While post-pandemic vehicle hours have increased, the increase has not kept pace with rapidly rising ridership. Figure 15 compares the percentage increases in registered rider trips to the percentage increases in capacity (revenue hours). While registered rider trips increased 82% from FY 2021 to FY 2022, service capacity only increased by 41 percent. In 2022-2023, trips returned to the same level as 2019-2020. However, while PAL operated 126,554 vehicle revenue hours to serve the same demand in 2019-2020, PAL operated 107,121 vehicle revenue hours, a decline of 24,391 vehicle revenue hours.

Figure 15 Changes in Registered Rider Trips and Revenue Hours, FY 2019–2023

	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Registered rider trips	201,004	209,136	105,089	191,457	209,284
Percent change	-	+4%	-50%	+82%	+9%
Vehicle revenue hours	117,220	126,554	70,873	99,926	107,121
Percent change	-	+7%	-44%	+41%	+7%

VEHICLE MILES

Figure 16 shows the number of total PAL vehicle miles, vehicle-revenue miles, and deadhead miles operated from FY 2019 through FY 2023. Total vehicle hours operated peaked in FY 2020 at 2,510,716, with 82% being revenue miles and 18% deadhead miles. Total miles decreased significantly to 1,326,711 and deadhead miles increased slightly to 20% of the total. In FY 2022, total vehicle miles increased to 1,996,039, and in FY 2023 increased further to 2,017,328. Deadhead miles in these last two years decreased to only 15 to 16% of total miles.

Figure 16 PAL Total Vehicle Miles and Vehicle-Revenue Miles, FY 2019-2023



ON-TIME PERFORMANCE

Customer Feedback

The reduced OTP is a source of formal rider complaints, discussed in Section 7. During the December 2023 public meetings, several attendees expressed frustration with continued poor OTP.

Figure 17 shows reported PAL on-time performance (OTP) for the past five years. This is based on data recorded in the Trapeze software and may not truly reflect OTP. See Section 5. According to the NFTA-Metro reports, in FY 2019-2020, between 90 and 91% of pickups were made on time. In FY 2021, with significantly less demand due to the pandemic, OTP improved to almost 94 percent. In FY 2022 and FY 2023, as ridership has increased rapidly but capacity lagged due to operator and vehicle shortages, only between 81 and 82% of pickups were made on time. FTA generally considers OTP below 90% as an indication of potential capacity constraints.

NFTA-Metro does not monitor on-time drop-off performance for trips with appointment times. During the team's on-site observations, PAL controllers did not consistently log appointment times during reservations calls even when riders provided a desired arrival time or appointment time. This is borne out in the sample data, which includes very few trips with appointment times listed. Because few trip records contained appointment times, it is not possible to accurately measure on-time drop-off performance. FTA considers on-time arrivals for appointment-driven trips as important as on-time pickups and encourages transit agencies to monitor on-time performance for drop-offs.

Customer Feedback

The reduced OTP is a source of formal rider complaints, discussed in Section 7. During the December 2023 public meetings, several attendees expressed frustration with continued poor OTP.



Figure 17 PAL On-Time Pickup Performance, FY 2019–2023

PRODUCTIVITY

Productivity is calculated at the ratio of total trips provided (client plus attendants and companions) to vehicle-revenue-hours of service operated. It is a common measure of service efficiency for complementary paratransit. Productivity typically ranges from 1.2 to 1.8; a productivity of 1.5 or better is considered good.

Figure 18 shows PAL productivity for FY 2019–2023. In FY 2019 and FY 2020 PAL productivity ranged from 1.67 to 1.74. During the first year of the pandemic, as ridership declined significantly, productivity fell to 1.48. In the last two fiscal years, productivity increased to 1.94 and 1.97.

Figure 18 PAL Productivity, FY 2019–2023

	2018–2019	2019–2020	2020–2021	2021–2022	2022–2023
Productivity	1.74	1.67	1.48	1.94	1.97

Productivity typically runs counter to on-time performance. Increases in productivity often result in lower on-time performance. This appears to be the case for PAL in FY 2022 and FY 2023. As NFTA-Metro has needed to serve more trips with less capacity, productivity has risen while OTP has fallen. Productivity is also a reflection of the number and percentage of group trips performed. The relatively high percentage of PAL workshop trips likely contributes to above-average productivity.

INCIDENTS AND CRASHES

NFTA-Metro keeps detailed safety records that it reports annually to U.S. DOT as part of the National Transit Database (NTD). This includes preventable and unpreventable crashes and passenger injuries by type. Figure 19 summarizes PAL safety information for CY 2019–2021. It also includes performance measures for collisions (preventable collisions per 100,000 vehicle-revenue-miles) and passenger injuries (injuries per 1,000 trips provided).

As shown, the PAL safety record is good. Preventable collisions per 100,000 revenue miles have ranged from 0.73 to 1.02. Passenger injuries per 1,000 trips provided have been well below one (ranging from 0.06 to 0.14).

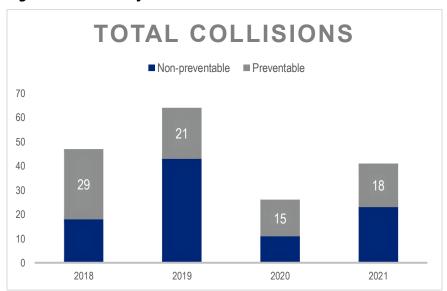


Figure 19 PAL Safety Statistics, CY 2019–2021

OPERATING COSTS AND UNIT COSTS

Figure 20 and Figure 21 show PAL total operating costs per year and unit costs (per vehicle-revenue hour, per revenue mile, and per registered rider trip) for FY 2019 through FY 2023.

In FY 2019 and 2020, total annual operating costs were \$10,403,200 and \$10,894,138, respectively. In FY 2021 (the first year of the pandemic), total annual operating costs decreased to \$7,878,395 due to the sharp decline in ridership. In FY 2022, as the effects of the pandemic began to lessen and ridership started to increase, the total annual operating costs increased to \$9,912,916. In FY 2023, ridership returned to near pre-pandemic levels and operating costs increased to \$10,928,196.

Associated unit costs also reflect the impacts of the pandemic. Pre-pandemic costs per revenue-mile ranged from \$5.08 to \$5.65, costs per revenue-hour ranged from \$82.20 to \$88.75, and costs per registered rider trip ranged from \$49.74 to \$51.76.

In the first year of the pandemic, unit costs increased significantly as service volume declined but not all associated costs could be cut quickly. Cost per revenue-mile increased to \$10.25, cost per revenue-hour increased to \$153.71, and cost per registered rider trip increased to \$74.97. In FY 2022, ridership increased while service capacity lagged due to issues with attracting and retaining operators. The result was very good unit costs: \$4.66 per revenue-mile, \$78.84 per revenue-hour, and \$41.15 per registered rider trip, but on-time performance fell from 92.4 percent to 82.5 percent.

In FY 2023, cost per revenue-mile was \$5.85, a 26% increase over FY 2022; cost per revenue-hour was \$92.54, a 17% increase; and cost per registered rider trip was \$47.37, a 15% increase over FY 2022. These cost increases reflect the wage increases in the most recent operator contract.

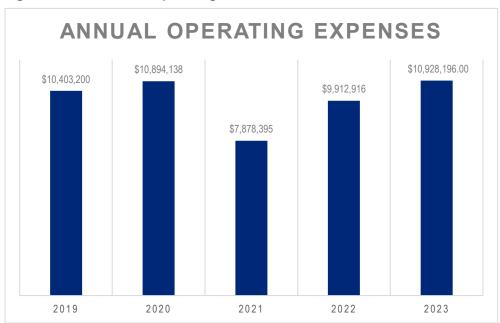
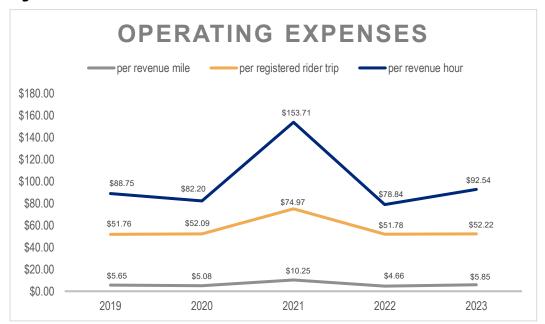


Figure 20 PAL Annual Operating Costs, FY 2019–2023

Figure 21 PAL Unit Costs, FY 2019–2023



5 OPERATIONAL PRACTICES

This section describes the consultant team's observations of operational practices in the PAL control center. Topics include reservations, scheduling, and dispatching, management and tracking of day-of-service issues, and performance reporting. The team's on-site observations spanned six hours (covering an afternoon peak and a morning peak) and included interviews with staff.

CONTROL CENTER STAFFING AND ORGANIZATION

As of June 2023, NFTA-Metro employed seven paratransit controllers with an eighth controller in the process of being hired. At that time, there were open shifts on Mondays, Tuesdays, and Wednesdays and NFTA-Metro filled covered these shifts with overtime when possible.

Staffing Schedule

Based on the June schedule, on weekdays, one controller is scheduled from 3:45 to 5 a.m. and two controllers are scheduled from 5 to 8 a.m. During the core weekday operating hours (8 a.m. to 6 p.m.), three to four controllers are scheduled (depending on the day). To cover these hours, NFTA-Metro rely on staff working overtime. If not, there are three to four controllers during core hours on Thursdays and Fridays but only two to three on Mondays, Tuesdays, and Wednesdays.

Between 4 and 8 p.m. on weekdays, two to three controllers are scheduled to work (depending on the day of the week). One controller is then scheduled on weekdays from 8 p.m. to close (typically around 10 p.m.).

On Saturdays, one controller is scheduled from 4 to 8 p.m. with two scheduled from 8 a.m. to 6 p.m., and one scheduled from 6 p.m. to close.

On Sundays, one controller is scheduled from 5 to 8 a.m., with two scheduled from 8 a.m. to 12 p.m., three from 12 to 1 p.m., two from 1 to 8 p.m., and one from 8 p.m. to close. Additional controller capacity on Sunday afternoons and evenings to 8 p.m. is designed to

accommodate the call volume on Sunday afternoons as riders call up to 8 p.m. for trips on Mondays.

Control Room Setup and Work Duties

The control room has four workstations. Two are equipped with two-way radio communications and controllers at these stations are responsible for run management. Controllers at the other workstations cannot communicate with operators and instead focus on trip reservations and trip scheduling.

All controllers are expected to take calls from riders for trip reservations, cancellations, trip confirmations, and Where's My Ride? (WMR) calls. This includes the controllers at the radio-equipped stations responsible for managing operators and runs.

The mix of duties depends largely on the shift. At times when there are only one or two controllers, the two workstations with two-way radio access are occupied and the one or two controllers manage runs as well as take calls from riders. When three or four controllers are on duty, two will occupy the workstations with radio access and will manage runs and operators as well as take calls from riders. The third or fourth controller will focus on rider calls and trip reservations and scheduling.

One controller serves as a lead scheduler and is mainly responsible for finalizing the next day's schedule. This controller works from 4 p.m. to close, spending the first two hours finalizing the schedule and then managing runs and taking rider calls until to close. The controller with the most scheduling experience works this shift Sundays through Thursdays finalizing schedules Monday through Friday. The controller with the second-most scheduling experience works this shift on Fridays and Saturdays.

TRIP RESERVATIONS

Riders can book, confirm, and cancel trips by speaking with the control center or by using online or automated voice options. Riders may call the main PAL number (716-855-7239). A recorded message provides a brief greeting. Callers are instructed to press "1" to continue in English and a message in Spanish asks them to press "2" to continue in Spanish.

Telephone-Based Reservations

A recorded message indicates callers can press "0" at any time to get assistance. The message then informs callers that PAL controllers are available from 8 a.m. to 8 p.m. to assist. Callers are reminded to have their customer ID#, the date they want to travel, and the addresses for their trip available. The message ends by reminding callers that they can press "0" at any time for help.

Callers are then presented five options:

- 1. Press 1 to book, confirm or cancel a trip using the automated system
- 2. Press 2 to check on a vehicle that is running late

This results in being moved to the front of the call queue

- 3. Press 3 to hear a description of PAL policies and procedures
- 4. Press 4 to hear rider alerts and other special messages
- 5. Press 5 -to hear instructions on how to use the automated system

None of these options will place callers into the queue for a live controller, for which one must press 0.

NFTA-Metro designed its automated menu to encourage riders to use the IVR to book trips. However, only about 5% of riders book trips this way, a similar rate to other transit agencies.

It appears that the design of the current call menu is leading to many riders disconnecting or abandoning the call. Phone reports provided by NFTA-Metro showed 50% or more of calls being abandoned throughout the day.

Incoming calls ring at each staffed available workstation. Any available controller can answer the next call. The team observed controllers listening to activity and responding accordingly. If a controller working at a station not equipped with radios is occupied, a controller assigned to run management will take calls if not otherwise occupied.

Scheduling Trips During Reservations Calls

NFTA-Metro uses the Trapeze PASS software to record and schedule trip requests and to manage the day of service.

When riders call to book a trip, controllers will typically use the following process to schedule the first leg of the trip:

- Request and enter the rider's ID number. Confirm the rider's name when it shows on the screen. If there are issues getting or using the ID#, look the rider up by entering the name.
- Enter the date of the trip
- Ask where the rider is going and put this in the destination address field
- Ask when the rider would like to travel
- Enter the rider's time request as the requested pickup time. For callers who indicated a time they need to be at their destination (appointment time), controllers typically back up 45-60 minutes from the appointment time and enter that as the requested pickup time.
 - Controllers do not typically enter appointment times into Trapeze

 Ask if the rider will be traveling with anyone else and, if so, enter the appropriate PCA or companion information

Trapeze Search Settings

With trip information entered, controllers use the software to search for scheduling options. The team noted that this search is being done inefficiently, not properly accounting for what is permissible under ADA. Specifically, Trapeze has a setting (SearchW) that when toggled on, searches for trips up to one hour before or after the trip request. When toggled off, Trapeze only searches for options within the on-time window (-15/+15 minutes). The team observed solutions being offered at the precise time of the trip request. Trips where solutions could not be found were left unscheduled.

Unscheduled Trips

Due to the SearchW feature being toggled off, the team observed instances when no scheduling option was available. Controllers then coded these trips as UNS (unscheduled) leaving the trip to be scheduled later. Controllers still confirmed the requested time with the caller. In some instances, particularly in the late afternoon when callers requested a next-day trip, controllers would state there were no scheduling options available but would still confirm the trip. Controllers would also suggest that riders call further in advance.

Return Trips

For return or subsequent leg(s) of trips, the team observed that controllers typically:

- Initiated scheduling of a return trip in the system, which automatically populates the new origin address with the prior destination address and the new destination address with the prior origin address
- Asked when the rider would like to be picked up for the return trip and entered this time into the "RT" (requested time) field in the origin portion of the trip booking screen

Again, with this information entered, controllers prompted Trapeze to search for scheduling options. Controllers selected an available option and offered it to the rider, but if no option was available, controllers coded the trip as unscheduled (to be scheduled later).

The team observed that when providing trip times, controllers consistently gave time windows rather than exact times, stating (for example), "You are scheduled for a pickup from 1 to 1:30, rather than stating "You are scheduled for a 1:15 pickup." This reinforces the 30-minute pickup window with riders and is a commendable practice.

Customer Feedback

Issues with how some control center staff interact with callers are reflected in reservations process complaints (see Section 7), from pre-engagement interviews, and the December 2023 public meetings. Some PAL riders with whom the consultant team spoke expressed frustration with some interactions and suggested more supervisor monitoring and better training is needed.

IVR and Online Trip Booking

As noted, riders have the option to use an interactive voice response (IVR) automated phone system or a website (paldirect.nfta.com) to book, cancel, or confirm trips. The IVR and online options are known as PAL Direct and are available to riders at any time.

PAL Direct recognizes up to 13 addresses and up to ten trips for which online reservations can be made. This meets most riders' needs according to PAL staff. Those who wish to modify the list must contact PAL.

IVR Trips

The phone tree is designed to encourage usage of IVR. An automated voice prompts callers for ID#, a date-of-birth-based password, offers a choice of trips from trip list, and asks for desired pickup or drop-off times. Callers are reminded that pressing "0" will connect to a controller. Trip times are not negotiated and entered in Trapeze as unscheduled. Trips requested using IVR are automatically scheduled as batch trips by the Trapeze system. Controllers manually schedule any trips that Trapeze cannot automatically schedule.

Online Trips

Riders can also visit the PAL Direct webpage to request, confirm, and cancel trips, choosing from the same list of ten trips. As with the IVR option, there is no negotiation of requested trip times meaning that PAL cannot suggest a time when the trip might more efficiently fit the schedule. When first launched, the web option was intended to permit trip negotiations, but this feature is not operational as of June 2023.

Notifications

The PAL Direct web portal is designed to notify riders the night prior to travel reminding them of upcoming trips. The app is also designed to notify riders that the vehicle is arriving soon. Reminders and same-day alerts can be via text, automated voice calls, or emails based on a rider's choice. At the time of the site visit, NFTA-Metro was sending reminders of next-day trips to all non-subscription riders who had opted to receive notifications. Due to

technical issues, PAL was not transmitting same-day vehicle arrival alerts. According to PAL staff, this has since been resolved.

Customer Feedback

Participants in the December 2023 public meetings noted some concerns with using IVR (only be able to manage pre-populated trips), and with the current notification process not working.

TRIP SCHEDULING

Two controllers with the most experience and expertise in scheduling work from 4 p.m. to close and finalize PAL run schedules each day. See staffing schedule above. The scheduler's primary job is to address the many unscheduled trips that result from the Trapeze settings and Pal Direct limitations also discussed above.

Because of operator shortages and vehicle issues, NFTA-Metro must close several runs each day. The schedulers stay in touch with managers at Frontier Garage and close next-day runs if there are not enough extraboard operators to cover scheduled absences (due to vacations or other leave).

To place unscheduled trips onto runs, the schedulers sometimes apply "looser" parameter settings when searching for solutions or they override indicated violations. If their review of the existing run schedule suggests that too much time is allowed by Trapeze to perform trips, they manually tighten the runs and add trips from the unscheduled list.

Long Trips

Schedulers indicated that they try to place the longest unscheduled trips first. The team observed that schedulers would identify a run near the pickup at the desired time, would clear out and reschedule several shorter trips to create time for the longer trip, and would then place it on the run. Doing this so late in the day almost guarantees that such long trips end up as direct (unshared) trips. On one occasion, the team observed a scheduler creating a new 4-hour run with an extraboard operator for one long trip, a costly and inefficient way to deliver service.

Subscription Trip Regrouping

Another significant daily scheduling task for PAL controllers is regrouping subscription trips that remain after batch scheduling is completed. As noted below, subscription trips are not templated, meaning appropriate groupings of subscription trips are not always maintained.

PAL schedulers know from experience which trips should be grouped. They then review the schedules after the batch scheduling is complete to create appropriate trip groupings.

Optimization and Final Run Review

Throughout the 14-day advance reservation period, as additional trips are placed on runs, the Trapeze system is set to periodically reoptimize trip placement on runs. This helps to ensure the most efficient trip placement that reflects the latest total trip requests.

Each night before the day of service, PAL schedulers manually review each run looking for parameter violations. Trapeze flags trip placements that may lead to late pickups, exceed maximum ride times, or infringe on run start, end, or break times. Schedulers determine if the system flagged violations are legitimate or if the trips can be performed without violating service standards and requirements. Schedulers manually address any trips expected to create problems.

Unscheduled Trips

PAL schedulers stated their goal is to not leave trips unscheduled at the end of their shifts. Some trips do, however, remain unscheduled on days of heavy demand or when resources are restricted (not enough operators or vehicles to create an adequate number of runs). Most unscheduled trips occur on the day of service when operators call out or vehicles are unavailable to cover scheduled runs.

Controllers must manually address unscheduled trips when runs are closed due to lack of operators, lack of vehicles, late pullouts, in-service incidents, or other issues. Because there is no dedicated scheduler on duty until 4 p.m. each day, controllers handling runs and/or taking rider calls must manage these trips.

Scheduler Ratio

As the time of the site visit, weekday ridership was regularly exceeding 800 trips and on some days was reaching and exceeding 1,000 trips. NFTA-Metro is managing with two controllers who work only part of their shifts as schedulers by asking other controllers to handle some scheduling duties. Other controllers handle rescheduling trips when runs are closed, and as mentioned below, customer service staff manage subscription trips. Some duties typically assigned to schedulers such as subscription trip templating are not being done at all.

Subscription Trips

Riders are directed to contact the PAL customer service staff (within the Customer Relations Division) to request subscription service or change/modify existing subscription trips. Staff members review whether riders have established the required 14-day trip history to qualify. Staff also manage the status of subscription trips if riders indicate they will not be needed for a short period. They also review no-show records and may suspend subscription status when riders accumulate three no-shows in a row.

Templating Subscription Trips

PAL loads subscription trips into the system as each new day of service is opened to reservations 14 days in advance. The team initially batch schedules and groups trips as appropriate. As subsequent batching and optimization is done throughout the 14-day reservations period, the initial scheduling and grouping of subscription trips can change. When finalizing schedules the day before service, schedulers must dedicate time re-grouping some subscription trips that the system has changed.

Standard batching also does not always produce and maintain the most efficient subscription trip scheduling, particularly for group trips. Some parameter settings, such as individual boarding and alighting times, can keep the system from grouping trips that can and should be together.

An efficient approach to managing subscription trips is to create and maintain a separate template that can preserved on specific runs. While this requires additional time to develop schedules, perming this task is worthwhile when subscription trips comprise a large and important portion of the overall service.

TRAPEZE PARAMETER SETTINGS

The consultant team reviewed the Trapeze parameter settings currently used. This includes the use of different parameter "sets" for initial trip bookings, for working to fine tune schedules, or to solve same-day-service problems.

NFTA-Metro uses two parameter sets: 1) DefRes-a default set for initial trip booking, and 2) ReSched, which has lower performance standards and is for use by controllers to place unscheduled trips or when same-day service problems need resolution. The following discussion notes the team's observations:

Pickup Window

 The pickup window settings are appropriate and reflect a tolerance of 15 minutes before to 15 minutes after the negotiated (scheduled) time.

Drop-Off Window

The settings defining the drop-off window are 15 minutes early to zero minutes late. This is a very tight on-time drop-off window and could limit the ability of the software to find scheduling options.

Use of Drop-Off Parameters

Trapeze features a "Yes/No" setting titled "Apply to Drop-Off?" This instructs the software to use the drop-off settings. PAL service is set to "No," meaning the software does not consider whether drop-offs are on time when scheduling trips.

Speeds

Trapeze has several options for setting vehicle speeds, which are important to determine the amount of time be allowed to get to and travel between pickups and drop-offs. Speeds can be set for peak and off-peak times, by total trip distance, or by type of roads traversed (highway, arterial, secondary, neighborhood, etc.). Some time ago, NFTA-Metro worked with Trapeze to establish speed settings for different roadways. NFTA-Metro has not recently evaluated or adjusted these settings. PAL schedulers commented that the software allows too much time for long trips, which limits grouping options.

On-Board Travel Time

The maximum on-board ride time setting is two hours and five minutes. Different
maximum travel times have also been set based on the estimated direct ride time of
the trip.

Slider Bar Settings

Trapeze has several "slider bars" that can control priority given to certain issues. Sliding a bar to the far left excludes an issue. Sliding to the far right gives an issue high priority. Settings are available for minimizing deadhead, minimizing violations, favoring the early part of the window, and minimizing out-of-the-way (circuitous routing). When considering adjustments, settings should be carefully balanced since they sometimes can work in opposition. The team noted that several slider bars were set to the far left (excluded), but some settings should be considered for adjustment.

RUN STRUCTURE

The Bus and Special Services Operations Division creates PAL's weekly shifts and run structures. Controllers who develop schedules provide input to this process. NFTA-Metro operators have four shift picks per year. The collective bargaining agreement with the Amalgamated Transit Union (ATU) governs the shift picks. Provisions of the agreement that impact shift/run design include:

- Regular runs must be scheduled for at least five days per week
- Two consecutive days off per week are required
- Operators must be paid for at least 8 hours per day, and any time over 8 hours worked per day must be paid at time and a half
- Straight runs must be at least 50% of total runs
- 25% of "swing" runs must be 10.5 hours or less
- Swing runs are paid overtime after 10.25 hours per day

Trip Requests and Scheduled Runs

The team reviewed the run structure and shift picks in effect at the time of the site visit. The structure featured 42 straight eight-hour runs, 11 swing runs, and 18 splits. Using data from the April sample week, the team then compared the average number of vehicles (runs) scheduled with the average number of trips requested by hour for weekdays (Monday-Friday), Saturday, and Sunday. Trip requests are the times entered into Trapeze and confirmed by controllers.

Figure 22 shows that weekday trip requests reflect pronounced spikes in demand from 7 to 8 a.m. and from 1 to 2 p.m. when many workshop trips are scheduled. The number of runs stays constant until 5 p.m. and does not change in response to the spikes in demand.

Figure 23 shows the run and trip profile for Saturday during the sample week. Demand peaked between 9 and 11 a.m. and again between 2 and 4 p.m. The number of runs gradually increased throughout the morning and midday, peaked at 1 p.m., and then gradually decreased throughout the afternoon and evening. The number of runs ramped up and down to generally match the demand, but there were excess runs between 11 a.m. and 3 p.m. and excess demand during the highest peaks.

Figure 22 Weekday Trip Requests and Scheduled Runs by Hour (April Sample Week)

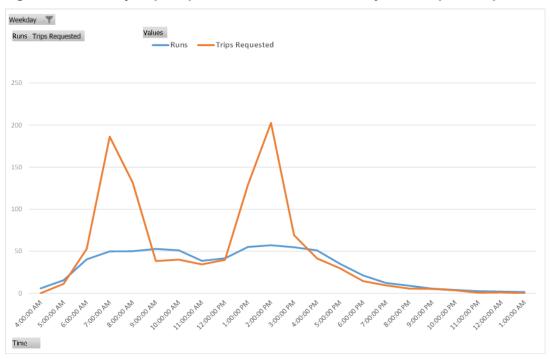


Figure 23 Saturday Trip Requests and Scheduled Runs by Hour (April Sample Week)

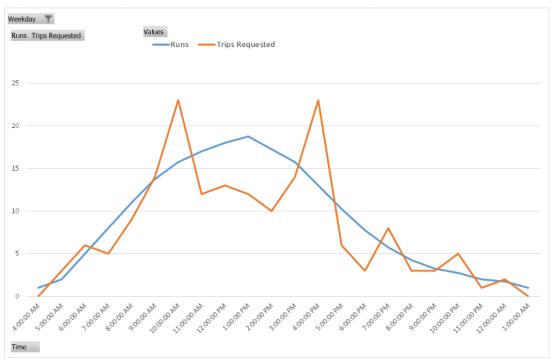


Figure 24 shows the same information for Sunday. Demand was highest from 8 a.m. to 1 p.m. and from 3 to 5 p.m. The number of runs ramped up in the morning and down in the afternoon to mirror demand, but demand far exceeded capacity for much of the day.



Figure 24 Sunday Trip Requests and Scheduled Runs by Hour (April Sample Week)

Hypothetical Productivity

The team used this data to calculate the number of trips requested per run by hour for each day of service. This reflects a "hypothetical productivity," meaning all scheduled runs took place according to the run structure and all trip requests were scheduled as desired. Figure 25 provides these hypothetical productivities for the sample week of April 16-22, 2023.

The data show that on weekdays from 7 to 9 a.m. and from 1 to 3 p.m., the hypothetical productivity was remarkably high—well over 3.0—to accommodate the high workshop demand. But for much of the rest of the day, the productivity was below 1.0 productivity (sometimes even below 0.5). This suggests excess capacity for much of the weekday.

On the sample Saturday, there were only three hours when the hypothetical trips per scheduled run exceeded 1.5. For 13 hours of the day the ratio of demand per run was under 1.0, dropping below 0.5 for ten of these hours. This suggests that inefficient scheduling practices leave excess capacity for much of the day and that the schedules are not aligned with service demand.

On Sundays, the ratio of expressed demand to service supply was at or above 3.0 for six hours of the day, and at or above 2.0 for ten hours of the day. This suggests that there are not enough runs and service supply for most of the day on Sundays.

Figure 25 Hypothetical Productivity for April Sample Week

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat
5 AM	-	0.53	0.70	0.48	0.52	0.35	1.50
6	1.50	1.24	1.10	1.17	1.02	1.00	0.86
7	3.50	3.62	3.76	3.70	3.66	3.96	0.63
8	4.00	2.87	2.72	2.65	2.31	2.59	0.75
9	3.00	0.59	0.80	0.75	0.70	0.73	1.00
10	2.75	0.57	0.73	0.73	0.72	0.91	1.44
11	3.50	0.78	0.76	0.67	0.81	0.82	0.71
12 PM	3.00	0.68	0.94	0.90	0.86	0.75	0.72
1	2.40	2.27	2.12	2.42	2.05	2.38	0.63
2	1.00	3.29	3.39	3.31	3.24	3.68	0.56
3	1.60	1.15	1.34	1.25	1.26	1.20	0.82
4	3.25	0.64	0.75	0.81	0.80	0.75	1.64
5	1.00	0.63	0.57	0.70	0.80	0.67	0.50
6	0.67	0.60	0.48	0.50	0.48	0.71	0.33
7	1.00	0.40	0.67	0.47	0.53	0.73	1.14
8	2.00	0.44	0.18	0.25	1.70	0.25	0.60
9	1.00	0.67	0.71	1.00	0.67	1.25	0.75
10	2.00	1.33	0.25	1.20	0.40	1.00	1.67
11	-	0.50	-	-	0.25	0.33	0.50
12 AM	-	1.00	0.50	0.33	0.33	0.50	1.00

DISPATCHING/RUN MANAGEMENT

As noted above, two of the workstations in the control room include two-way radio base stations to allow voice communication with operators. On weekdays, controllers cover both workstations and manage runs from 5 a.m. to 8 p.m. On weekends, when there are only 10-11 runs in service, one controller might be sufficient to manage runs and the second focuses on calls from riders, although both may work at radio-equipped stations.

Managing Pullout

An important part of run management is ensuring runs depart as scheduled and on time. This responsibility is shared by controllers at the control center, and by clerks and bookers at Frontier Garage. Clerks must be diligent about notifying controllers in a timely way when operators call out unexpectedly and there are no extraboard operators to cover a run. Bookers must do the same if there are not enough vehicles available to cover all scheduled runs. Doing so gives controllers as much time as possible to close runs and reassign trips.

Controllers and clerks must also pay attention to when scheduled runs are past time for pullout. Currently, controllers rely on clerks to notify them when operators are late. This can sometimes be missed when the operator has not appeared at the window to report, and the clerk is not watching the pullout sheet and does not realize that the run is due to depart.

Tablet Issues

Tablet malfunctions are an ongoing challenge. One controller estimated that up to half of the operators report issues with malfunctioning tablets. During the pandemic, NFTA-Metro replaced Rangers with Android tablets running DriverMate. In late 2022, NFTA-Metro changed the table communication standard from cellular to Wi-Fi. Part of the issue was that tablets were not restricted to the vehicle's onboard router's Service Set Identifier (SSID).

Based on interviews, operators and controllers distrust the tablets' effectiveness. During the site visit, a controller reported that up to half of the tablets are down on any given day. Operators are instead using paper manifests.

Tablets vs. Mobile Data Terminals

NFTA-Metro switched from Trapeze Ranger MDCs to tablet-based DriverMate during the pandemic. While tablets are a more cost-effective option, they need to be more frequently replaced. NFTA-Metro has experienced issues with tablet charging in addition to the previously discussed connection issues. In June 2023, PAL was in the process of purchasing more durable tablets for testing.

Rangers utilize proprietary navigational systems built by Trapeze which integrate better with PASS. DriverMate uses Google Maps, which can create discrepancies from the PASS system. NFTA-Metro permits its operators to use their own area knowledge when traveling between pickups and drop-offs.

Proactively Managing Runs

The tracking and recording of arrival and departure times and mileage at pickup and dropoff locations in Trapeze is critical. Without both times entered, it is not possible to accurately calculate on-time performance, on-board ride times, or to verify no-shows.

A review of the April trip data indicated that even when tablets are functioning, operators were not recording both arrivals and departures for pickups and drop-offs. The data typically shows only one time.

NFTA-Metro is not proactively managing runs to identify when upcoming trips might be late. To do this effectively, operators must first record times at pickup and drop-off locations, including arrival at pickup, departure from pickup, arrival at drop-off and departure from drop-off. With this information, Trapeze can recalculate upcoming pickup and drop-off times and flag when trips will be late.

Part of the challenge is due to ongoing tablet issues. But controllers are not seeking input from operators and entering times into Trapeze in real time. Controllers instead rely on operators to inform them when they are running late.

When tablets malfunction, controllers freeze the run, meaning they cannot add trips to runs. In these instances, not only are controllers unable able to proactively monitor runs, but they also cannot use any available slack time.

The team observed that controllers managed runs only when operators or riders report late trips. The team did not observe controllers scanning through runs to look for potential late trips. Controllers were not familiar with Trapeze's dispatch screen display that shows predicted late trips runs on one screen for dispatcher review and action. Controllers may be discouraged from attempting proactive run management because of the extensive issues with the tablets and actual performed times.

Based on interviews, it is possible that tablets have slightly different settings. For example, operators reported being able to press "Arrive/Perform" five minutes prior to the start of the pickup window on certain tablets but must properly wait until the window starts on others. Another set of tablets does not permit operators to perform the trip until 15 minutes into the pickup window. This anecdotal information needs verification.

Use of Road Supervisors

NFTA-Metro's road supervisors are responsible for both fixed-route service and PAL, but sufficient road supervision resources may not be allocated to PAL. Controllers indicated that it is difficult to get road supervisors to assist with PAL issues and needs. One commented

that even when there are accidents, road supervisors do not assist. Controllers call NFTA-Metro Transit Police instead.

Accident Data Entry

The team observed a controller handling an accident but who had difficulty entering information into OrbCAD. The data entry fields were set to display only limited information, which limited what the controller could see while entering data.

Managing and Documenting No-Shows, Cancellations, and Missed Trips

Another important control function is the management of no-shows, cancellations and missed trips. For no-shows, operators contact controllers when they arrive for a pickup and the rider does not board as expected. Before marking a rider as a no-show and instructing operators to depart, controllers confirm the location of the pickup with the operator. They also confirm that operators arrived within the pickup window and have waited at least five minutes.

With functioning tablets and with operators properly recording arrival times separate from departure times, controllers can use Trapeze to verify this information. Because of the tablet and trip time recording issues, controllers have been relying on radio communications with operators to verify this information.

Controllers indicated that operators typically contact control before considering a rider to be a no-show and moving on.

Controllers need to differentiate between no-shows, missed trips, cancels-at-door and late cancels, and need to accurately document the final disposition of trips. When vehicles arrive late (past the 30-minute window) and riders do not board, it is important for controllers to code the trip as a missed trip rather than as a no-show. When riders cancel trips late (less than two hours before the scheduled pickup), this also needs to be recorded correctly.

Controllers do not consistently code trips. The team observed one controller coding a trip as a cancel-at-door when the vehicle was late, and the operator reported that the rider came to the door and said they were no longer making the trip. This may be reflected in monthly and annual trip data, which show significant fluctuations in the percentage of missed trips.

Recording trip notes for no-shows, missed trips, and cancellations in Trapeze tracker notes is standard practice. The team observed controllers doing this sometimes, but not consistently.

6 RESOURCES

This section provides information about the resources used to provide PAL service. This includes vehicle operators, vehicles, technology, maintenance, and funding.

PAL OPERATORS

At the time of the site visit, NFTA-Metro employed 90 PAL vehicle operators. The budget authorizes 104 positions. Of the 90 operators employed, fifteen were on long-term leave for various reasons, leaving 75 operators available for daily service.

The Spring 2023 weekly shift pick for PAL service includes 63–69 weekday runs, 11 Saturday runs and ten Sunday runs. The current workforce can cover these shifts, but that leaves a minimal extraboard (three on weekdays and none on weekends). Additional extraboard coverage necessitates bringing operators in on overtime.

NFTA-Metro was developing a summer 2023 shift schedule that would increase the number of weekday runs to between 64 and 72 per day and that added one Sunday run, bringing the number of runs on both Saturdays and Sundays to 11. The proposed summer schedule also increased the number of scheduled extraboard to six per weekday, still leaving the weekends without a scheduled extraboard. The proposed summer schedule assumed a net increase in available operators.

On the first day of the site visit (June 6), there were 13 PAL extraboard operators, a combination of scheduled and overtime assignments. At the start of the day, nine had covered scheduled outs (vacations, days off, and other leave). Only four extraboard operators were available for same-day callouts and other same-day coverage needs. PAL controllers indicated the need to close runs each day due to insufficient operators. The exact number ranges from two to eight per day, depending on the number of same-day operator callouts and the demand for the day.

The shortage of operators is clearly affecting run coverage, on-time performance, and is a major contributing factor to the compliance issues noted Section 4. It is also impacting the number of runs and shifts created for PAL service. Additional regular runs are necessary to improve on-time performance and more extraboard runs are necessary to cover same-day callouts.

Based on the June 2023 demand, the consultant team estimates the need for ten additional operators. This increase would allow for another two to four weekday runs, another two runs on both Saturday and Sunday, an increase to ten of scheduled extraboard operators each weekday, and for one scheduled extraboard operator to be available on weekends. As demand continues to grow, as it most likely will, the team estimates the need for additional operators throughout 2023.

Recruitment and Retention

The recruitment and retention of transit operators is a nationwide challenge; NFTA-Metro is no exception. An overarching challenge is that labor agreements incorporate seniority rules for work assignments. All bus operators have earned the right to select work shifts in order of seniority. During one of four shift picks per year, the newest hires are left to choose work shifts that remain after others with more seniority have already made selections.

NFTA-Metro's Department of Human Resources manages the PAL operator recruitment process and works diligently to recruit new applicants. In 2022, NFTA-Metro hired and trained 26 new operators and added 13 in the first four months of 2023.

According to HR staff, this rate of new hires would be adequate to replace departing operators and to meet growth in demand. The number of recruits who do not complete training is higher than desired and the post-training retention rate is lower than desired. The employee turnover rate in 2022 was 36%. Forty percent of the turnover is from PAL operators leaving to become fixed route operators, where wages are higher than for PAL operators after the third year of employment. See compensation discussion below.

Recruiters strive to explain the requirements of working as an operator, including the expected work schedules (weekends, nights, split shifts, etc.). The Manager, Bus & Special Service Operations interviews candidates and further explains the work requirements. According to NFTA-Metro staff, some new hires do not fully grasp the nature of the work schedules until they receive their initial work assignments and begin work, leading to early resignations.

It is not known, but some applicants who express an interest in driving for PAL may be discouraged by having to first go through and pass fixed-route training. Some may have little interest in being a fixed route operator and may decide not to continue with training. Others may not pass the fixed route driving tests.

The turnover rate for PAL operators in the first year is high. Operators who make it through the first year or two of employment tend to stay on the job with far lower turnover. High turnover among new operators is likely a combination of: (1) not receiving adequate support to succeed in the job during the first few months of service, (2) not realizing the true nature of the job and how difficult it is to be a PAL operator, and (3) being required to take the least

desirable weekly shifts which may not allow personal needs (child care, other commitments) to be managed.

PAL Operator Compensation

Effective April 1, 2022, PAL and Big Bus/Rail operators earn the same hourly wage for the first 36 months of employment. The approved contract provided a 9% salary for that year with 2% increases in 2023 and 2024 and a 2.25% increase in 2025. PAL operator wages do not increase after the third year, but Big Bus/Rail operator salaries grow with each additional year of service through 60 months. Moving from PAL to Big Bus after 36 months would lead to a 10% increase in hourly wages in 2023 and a 12.5% increase in 2024. For longer-tenured PAL operators, this differential is an incentive to move to fixed route.

PAL Operator Training

NFTA-Metro jointly trains its fixed-route bus and PAL operators. Figure 26 summarizes the number of days and topics covered as part of the operator training program. PAL operators must learn how to operate a Big Bus even if they wish to only drive a smaller PAL vehicle. All trainees must obtain a commercial driver's license (CDL) by taking a written test and road test administered by the state DMV. The curriculum includes nine days of big bus training, 16 days of PAL instruction with a trainer, a final exam, line practice with a start day tied to first obtaining a CDL, and four days of Customer Appreciation Program (CAP) training. The requirement to learn how to properly operate a full transit bus may limit the number of potential PAL applicants.

Figure 26 Operator Training Program Summary

Days	Topic	Comment
2	Employee orientation	
1	TAPTCO system (videos)	Focus is on big bus, including wheelchair securement and stop announcements
1	Union rules, sensitivity training, PAL introduction	
9	Big bus operation instruction	Applies to all trainees
1	Vehicles & other equipment	
1	CDL written & road test	Administered by NY State Department of Motor Vehicles (DMV)
16	PAL operator training	Two days of observing and finding key landmarks, and then behind-the-wheel with supervision
5	Line practice	For PAL operators with CDL

Days	Topic	Comment
1	Final exam	Written test
4	Customer Appreciation Program (CAP)	

Written Test

The test administered to trainees (School of Instruction Questionnaire for Student Bus Operator) includes 198 questions. Six ADA-related questions focus on fixed-route service (stop announcements, lift inspections, wheelchair securement, fares). One question addresses boarding PAL riders onto vans. There are no questions regarding how to treat riders with different disabilities including those whose disability may not be apparent.

Customer Feedback

About a third of operator complaints were about rudeness. Others included specific concerns about sensitivity to riders with vision disabilities, hearing disabilities, and cognitive disabilities. Securement-related issues were raised in seven complaints.

At the December 2023 public meetings, participants noted some operators were unfamiliar with places in the service area and suggested more training is needed on customer service, sensitivity, and securement of mobility devices.

Customer Service Training

NFTA-Metro engages a vendor to provide twice-yearly customer service support training for staff who engage with riders such as members of the customer relations team and staff in the control center.

FLEET

As of the time of the site visit in early June, there are 78 vehicles in the PAL fleet. All vehicles are accessible with 48 equipped with hydraulic lifts and 30 equipped with ramps.

The seven oldest vehicles in the fleet (model years 2008-2011) are large body-on-chassis minibuses in use when PAL service was known as MetroLift. These vehicles seat 12-9 ambulatory passengers and have two wheelchair securement locations.

Between 2012 and 2017, NFTA-Metro switched to using a slightly smaller body-on-chassis minibus that can accommodate up to eight ambulatory passengers and two wheelchairs and 41 remain in service (31 gas and ten CNG). Vehicles 2016 and older are on Ford cutaway chassis.

In 2018, NFTA-Metro purchased six MV-1s, smaller ramp-equipped minivan-sized vehicles. MV-1s can accommodate four ambulatory passengers, or one rider using a wheelchair and one additional ambulatory passenger. These purpose-built vehicles were designed as accessible taxicabs for New York City. The manufacturer is no longer in business and parts are not available. As a result, only one of the six purchased remains in service.

Beginning in 2018, NFTA-Metro purchased low-floor small buses for the PAL service and as of June 2023, had 24 such vehicles in service with seven additional vehicles being equipped and prepared, but not yet in service. These vehicles are built on a Dodge van chassis, are ramp-equipped, and can seat 12–14 ambulatory riders with space for two riders who use wheelchairs.

At the time of the June site visit, 26 of the 78 vehicles were out-of-service for a variety of reasons, leaving 52 available for service. According to staff, the peak weekday pullout need for the PAL service was 55 vehicles, which means there were not enough vehicles to cover scheduled runs. On average, staff had to close about three runs each day due to lack of vehicles. PAL operated with no spares.

The vehicle shortage has led to other operating issues, such as delays in afternoon pullouts that cannot commence until morning runs end. Late afternoon pullouts can have a cascading impact on on-time performance, particularly between 1:30 and 2 p.m. when workshop pickups for return trips take place.

At the time of the visit 30 PAL vehicles were more than ten years old and 19 were more than five years old. According to FTA, the useful life of these vehicles is five years and 150,000 miles.

The PAL fleet includes 26 vehicles with over 300,000 miles and 17 with 150,000–300,000 miles.

The age and mileage of the fleet does not appear to be the primary reason for the current shortage of vehicles. The NFTA-Metro maintenance department has kept many of the oldest vehicles in the fleet in operating condition, particularly the gas-powered vehicles. Eighty-four percent (32 of 38) of the oldest gas-powered vehicles, model years 2008 through 2016, were available for service on June 5, 2023. Only 54% (13 of 24) of the small buses purchased between 2018 and 2023 were available, many in need of significant repairs or warranty work. Only one of the six MV-1s (17 percent) were available for service, all with significant issues.

The CNG-powered vehicles have also proven to be unreliable and difficult to keep operational. Four of the ten CNG-powered minibuses purchased in 2016 were out-of-service on June 5, 2023. All six MV-1s are also CNG-powered, which has contributed to their unreliability, although one of the many problems keeping this vehicle available. The company that made the MV-1s is no longer in business and many parts are no longer available.

The addition of the seven newer small buses that were being readied should help with meeting daily pullout needs. However, it should be noted that these are the same small buses on Dodge chassis that have proven to be less reliable to date.

NFTA-Metro was close to approving the purchase of 15 more PAL vehicles. Eleven of these will be body-on-chassis minibuses, on Ford chassis, like the design of the most reliable vehicles in the fleet. The other four will likely be Ford Explorers. These vehicles likely will not be received and placed in service for many months—even up to a year—given the current industry-wide backlog.

Vehicle shortages can be expected to continue and may worsen if the oldest vehicles in the fleet fail and if reliability issues continue with the newest vehicles. Maintenance costs can also be expected to increase until significant new purchases can be made.

Customer Feedback

Fleet condition was mentioned in customer complaints and 2021 rider survey (see Section 7). During the December 2023 public meetings, several attendees asked for new buses given the condition of the current fleet. In addition, several meeting attendees expressed appreciation and for the new low-floor PAL vehicles complimenting their ride quality, spaciousness, and easy access via the ramps.

Fleet Replacement Needs

The team estimates that NFTA-Metro will need to acquire 34 additional vehicles. This is based on the addition of four runs to meet current demand and deliver compliant service, assumed ridership growth of 10%, and the required number of spares to have a 20% spare ratio. See Figure 27, which also shows the impact of retiring the vehicles past their useful live and offset by the acquisition of 15 new vehicles, currently under consideration.

Figure 27 PAL Fleet Needs

Service Needs	Increment	Vehicles Needed
June 2023 peak pullout needs	55	55
Added runs needed for ADA compliance	+4	59
Assumed 10% demand growth in FY 2024	+12	71
20% spare ratio	+14	85
	Vehicles	Shortfall
Current fleet (78) plus newly prepped vehicles (7)	85	0
Vehicles removed from service (past useful life)	(49)	(49)
Vehicles added from current procurement plans (not committed)	15	(34)

Some transit agency paratransit fleets also include sedans, which are less costly to purchase and operate than cutaway buses. Because so many PAL trips are group trips to/from workshops, many of which include riders using wheelchairs, the use of sedans is not advised. Any potential cost savings from using sedans would be more than offset by the lowered flexibility in run management.

MAINTENANCE STAFF AND EQUIPMENT

The maintenance team at Frontier Garage maintains PAL vehicles. Two lifts—one four-post and one two-post are dedicated to the PAL fleet. NFTA-Metro is considering filling a pit in an adjacent bay to add a third lift for PAL work. Parts shortages have been a problem, but at the time of the team's site visit, staff reported having adequate parts on hand for PAL vehicles, except for the MV-1s (parts no longer available).

The manager of the Bus Equipment & Maintenance Division stated that the Frontier Garage is maxed out in terms of the number of vehicles they can accommodate. If the PAL fleet grows (see prior discussion), they may need to send work to other NFTA garages.

There are currently five technicians working on PAL vehicles.

PAL vehicles receive preventive maintenance every 3,000 miles and rotate between standard PM and a more detailed safety inspection. When a standard PM is done at 3,000 miles, a safety inspection (which also includes standard PM work) is done at 6,000 miles, and so on.

Keeping the newest vehicles (Dodge ProMasters) in service has been an issue. Transmission issues are common. Because of issues with these vehicles, NFTA-Metro has had to keep the older vehicles in service longer than is reasonable and cost-effective.

The manager indicated that, in the future, NFTA-Metro will revert to the Ford body-on-chassis small minibuses that were purchased in the past.

OPERATING BUDGET AND EXPENSES

The PAL annual budget of approximately \$10-11 million is primarily driven by operator salaries, with 75% of the budget allocated to operators and between five mechanics allocated to PAL. Figure 28 shows annual operating expenses for the past five years and Figure 29 shows these expenses per revenue mile, registered rider trip, and revenue hour. See Section 4 for a discussion of trends.

Figure 28 Total PAL Operating Expenses FY 2019-2023

OPERATING EXPENSES

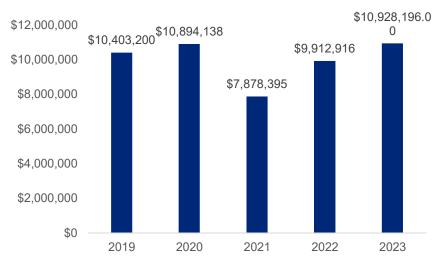
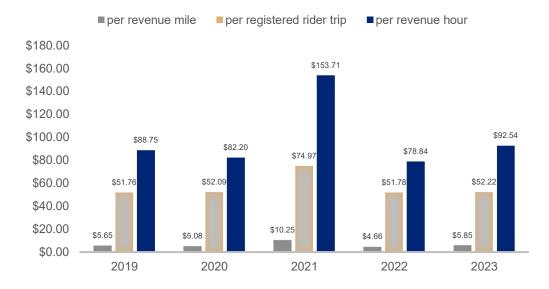


Figure 29 PAL Operating Expenses per Revenue Mile, Trip, and Revenue Hour, FY 2019-2023

OPERATING EXPENSES



Tracking Expenses

The manager of finance and administration noted it is currently difficult to delineate operating dollars between fixed route bus and paratransit. NFTA-Metro does not pay

maintenance people specifically for paratransit work, so there is no precise way to track maintenance work attributed to PAL. As a workaround, staff estimate PAL-related costs.

Future Funding Challenges

Like most transit agencies, NFTA-Metro relied heavily on federal COVID relief funding during the pandemic. Without these funds, NFTA-Metro faces financial constraints cliff that limit their ability to make timely vehicle purchases and provide adequate service.

Cost Tracking and Measurement

PAL's decentralized organization makes it difficult to allocate resources, measure expenses, and plan future budgets. At the same time, there is an aspiration to establish a more consistent and collective budget process. The lack of centralization makes it especially difficult to assess PAL-specific budget needs.

Annual Budgeting

Developing the PAL budget each year is a function of contract terms and changes in utility costs. The process also involves collaboration with Metro/fixed route staff, especially during the annual budget call in late July, when staff discuss and confirm recommendations. The goal is to incorporate necessary additions while justifying their inclusion in the budget.

Benchmarking

NFTA-Metro is part of the American Bus Benchmarking Group. NFTA-Metro's peer agencies use data visualization platforms like Tableau to analyze data. NFTA-Metro would like an enterprise system for sharing and analyzing data but faces challenges in doing so (overall organization, union issues, etc.).

TECHNOLOGY

The discussion of trip reservations in Section 5 includes details on Trapeze PASS, the paratransit scheduling and dispatching software that NFTA-Metro uses. The discussion of dispatching and run management in the same report section covers ongoing tablet issues. The following discussion covers other technology matters such as technology strategy, software to manage vehicle assignments, having dedicated support staff, and using tools for monitoring and reporting performance.

Technology Strategy

Based on interviews and observations, NFTA-Metro does not have a technology roadmap for PAL service. A technology roadmap can provide the foundation for identifying critical technologies and finding technology gaps. As PAL demand grows, technology gaps will widen. For example, manual processes will become increasingly burdensome to manage.

Vehicle Assignment Software

Bookers at the Frontier Garage use paper reports to indicate which PAL vans are out of service. Bookers could utilize a feature within Trapeze PASS or consult with controllers to identify which van to assign to a run when there are vehicle availability issues and when multiple runs need to go out at the same time.

Trapeze offers a tool for yard management that can also manage fixed-route buses. The tool is not a fully automated solution and requires maintenance staff to walk the garage several times a day.

Other vendors offer fully automated vehicle location systems. While these require a larger investment, they offer real-time insights into which vehicles are available, which are on the road, and which are in maintenance.

Dedicated ITS Support

At NFTA-Metro, an IT systems administrator is engaged in but not dedicated to PAL operations. The team was unable to determine the level of support needed, but as requirements grow, it may be necessary to have additional IT software support, particularly for Trapeze operations who can investigate ongoing issues, participate in discussion forums, etc.

Performance Monitoring and Reporting

PAL's processes for generating performance reports are either manually generated or from standard reports within Trapeze. One example of a manual process is for call sheets. At present, staff take 4-6 screenshots of the runs list, print them, and input the data into an Excel spreadsheet. An automated process is to develop a SQL server reporting service report to extract the relevant run and employee data from PASS. This report could be joined with an operator roster to automatically populate operators' phone numbers.

7 INPUT AND FEEDBACK

This section describes how NFTA-Metro is seeking input throughout the course of the study as well as the ways in which NFTA-Metro regularly manages PAL-related feedback.

STUDY OUTREACH AND INPUT

External Stakeholder Committee

NFTA-Metro established an External Stakeholder Committee to provide feedback and insights throughout the study. The committee is composed of PAL riders, advocates, and representatives from local foundations, public agencies, and disability organizations. Prior to the first committee meeting, the consultant team conducted pre-engagement interviews with committee members to gather initial input on key areas of concern and seek ideas about broader engagement throughout the study. Three committee meetings were held in 2023 to solicit input on key topics such as public engagement strategies, areas for service improvement, unmet needs, and priorities for the study. Refer to Appendix A for meeting summaries with more details on committee attendees and discussion themes.

Project Website

NFTA-Metro established a project website at www.nftametroparatransitstudy.com to share information about the study, including its purpose, goals, and phases, and solicit feedback from riders, caregivers, advocates, and the public. The website includes all information presented at the public meetings, including presentations and summaries, and an input form where visitors can submit open-ended comments and suggestions related to the study and PAL service.

December 2023 Public Meetings

NFTA-Metro held two public meetings in December 2023 to present an overview of the study and gather input on current challenges and suggestions for improvement. One meeting was held virtually via Zoom. An in-person meeting took place at the Schiller Park Senior Center in

Buffalo. Both meetings included a presentation followed by interactive discussions in breakout groups. Appendix A includes meeting summaries.

Follow-up Interviews

The consultant team offered an opportunity for follow-up phone interviews with attendees and registrants of the December public meetings. Between January and February 2024, the team conducted 16 one-on-one phone interviews with a mix of riders, family members/caregivers, and advocates. These interviews provided an additional forum for stakeholders to share detailed feedback in an individual setting. Appendix A summarizes these discussions.

PAL Complaint Process

ADA Requirements

The ADA regulations require transit agencies to designate an ADA coordinator to ensure ADA compliance. The complaint process must incorporate due process standards and ensure prompt and equitable resolution of complaints related to ADA violations. To enhance accessibility, the agencies must advertise the process for filing a complaint, along with the contact information of the designated employee. In addition, agencies must make the complaint procedures accessible to individuals with disabilities and should provide alternative formats as needed.

The regulations require transit agencies to communicate their response to complainant allegations promptly, detailing reasons for their response and document these communications for recordkeeping purposes.

NFTA-Metro has a designated ADA coordinator and lists contact information on its website for an ADA/EEO Administrator. Its overall complaint process is compliant and accessible.

Complaint-Handling Process

The Special Services & Systems unit within the Bus and Special Services Division oversees the PAL complaint process. Two staff members handle PAL complaints. Riders can send complaints via two email addresses (PALfeedback@nfta.com and PAL@nfta.com).

The complaint-handling process involves inputting details of the complaint and sending it to relevant supervisors and departments for resolution. Staff follow up with customers seeking a response and inform customers about how they resolved the specific complaint.

Analysis of Complaints

Between July 2022 and June 2023, NFTA-Metro received 426 PAL-related complaints. This included 179 complaints that staff deemed supportable following an investigation. Figure 30 shows the distribution of complaints by topic, which shows the top four categories of complaints were vehicle operator training (27%), the reservations process (15%), customers being improperly assessed with a rider no-show, and vehicles arriving late.

Figure 30 PAL Complaint Topics

Complaint Category	Percent
Vehicle operator training	27%
Reservations process	23%
Improper no-show	14%
Late arrival	14%
Other	8%
Missed trip	4%
Service quality	4%
Technology	3%
Vehicle	3%

RIDER SURVEY

PAL conducted a customer satisfaction survey in 2021, which revealed areas of potential improvement. A quarter of surveyed riders raised concerns about eligibility information, hold times, on-time pickups, and securement of mobility devices.

Nearly 38% of respondents were not aware of their eligibility status and could not say if they were unconditionally or conditionally eligible.

While 25% of respondents expressed concerns about mobility device securement, this percentage appears noteworthy considering only around 25% of paratransit riders use mobility devices. This may be a training issue.

Phase I: Existing Conditions

APPENDIX A PUBLIC ENGAGEMENT SUMMARIES